



# The CHEMIST AND DRUGGIST

for RETAILER - WHOLESALER - MANUFACTURER

Established 1859

28 Essex Street, Strand, London, W.C.2

Registered as a Newspaper

No. 3082  
VOL. CXXX

MARCH 4, 1939

Annual Subscription (with  
Diary) 20/-, Single Copies 9d.

THE NICEST WAY OF TAKING  
HALIBUT LIVER OIL

# HALIBORANGE



DISPLAY  
HALIBORANGE

in your window and on your  
counter and link up with the  
national advertising campaign  
now running.

Introduce it to your cus-  
tomers as *the nicest way*  
*of taking halibut-liver*  
*oil*, and you will rapidly  
create a regular and  
surprising demand.

The attractive showcard  
illustrated will be sent  
on request.



Telephone:  
Bishopsgate 3201 (12 lines)

Telegrams:  
Greenburys Beth London



ALLEN & HANBURYS LTD - LONDON - E.2



*Maintain your  
takings and profits!*

*Sell*

## **Euthymol TOOTH PASTE**

- (1) NO PRICE REDUCTION
- (2) NO SIXPENNY SIZE
- (3) ON THE P.A.T.A. FOR  
OVER 25 YEARS

Minimum  
Retail Price  
1s. 3d. per tube

SEND FOR BONUS TERMS

PARKE, DAVIS & CO., 50 BEAK STREET, LONDON, W.1.



# Show Elasto—It Sells on Sight!



## ONE SHILLING AND THREEPENCE PROFIT ON EVERY SALE

ELASTO Advertising is Nation-wide and Consistent. An ever-increasing demand for this product is being created at your very door; a slight effort on your part will bring this new and profitable business to your counter. A showcard or a few Elasto cartons displayed in your window will bring most gratifying results. You can recommend Elasto with confidence for: Varicose Veins, Bad-Leg, Phlebitis, Eczema, Hardened Arteries, Heart Troubles, Rheumatism, Bad Circulation, etc. A Tablet Remedy, easy to handle—and reliable.

**Retail Price 5/- per pkt. Wholesale 45/- per doz.**

P.A.T.A.



SHOW MATERIAL GLADLY SENT FREE ON REQUEST

**The NEW ERA TREATMENT CO. LTD.**  
**CECIL HOUSE, HOLBORN VIADUCT, LONDON, E.C.1**

# ANOTHER WINNER from **SPLENDOR**

# Spot-Stik



Lydia O'Leary's  
Original "COVER MARK"  
in Handy Stik Form —

## at **HALF-A-CROWN**



**THIS SMART DISPLAY WILL  
MAKE MANY SALES FOR YOU**

SPLENDOR Limited of Nottingham — coincident with their appointment as Sole Consignees for COVER MARK products in Great Britain and Eire — announce a new Standard Size SPOT-STIK to sell at half-a-crown. This opens up a new market for the chemist. Thousands of women have *needed* and *wanted* SPOT-STIK, but could not afford the larger De Luxe Size formerly sold at 5/-. You can now satisfy their demands with the Standard Size at 2/6. Many will still prefer the De Luxe Size, now a greater value than ever at the reduced price of 4/6. Millions of women will read SPOT-STIK advertising in big-circulation women's newspapers and periodicals. Be prepared to meet the demand. Order stocks now through your usual wholesaler.

**TWO SIZES. TWO CHANCES FOR PROFIT!**

NEW  
STANDARD SIZE

**2/6**

NEW LOWER PRICE  
DE LUXE SIZE

**4/6**

**SPLENDOR LTD • NOTTINGHAM**

*Sole Consignees for Great Britain and Eire*





*The  
Colloidal  
Magnesia  
on Attractive  
Bonus Terms*

OF COURSE A



LINE

# CROOKES' LACTOMAGNESIA

4 ozs. - - - 1/-  
8 ozs. - - - 1/9

## DENTIFRICE

2 oz. Tubes - - - 1/-

Crookes' Lactomagnesia has three distinct uses—it sells to three classes of customer.

As an *antacid* Lactomagnesia presents magnesium hydroxide in a state of extremely fine subdivision—the colloidal form—accelerating the neutralisation of acids.

As a *laxative* it is gentle, safe and particularly suitable in infantile disorders, and for children.

As a *mouthwash and in dental hygiene*, the extreme fineness of the preparation enables it to find its way in the folds of mucous membranes and in the crevices between the teeth; neutralising food acids and thus preventing decay.

Below are details of the Bonus Terms—offered ONLY to the Qualified Retail Trade.

ORDER	DISCOUNT	BONUS	ORDER	DISCOUNT	BONUS
3 doz.	25% & 10%	1 per doz.	6 doz.	25% & 10%	2 per doz

THE CROOKES LABORATORIES (British Colloids Ltd.) PARK ROYAL, LONDON, N.W.10

Telephone: Willesden 6313 (5 lines)

Telegrams: Collosols, Harles, London

# EXTRACTS

TINCTURES RESINOIDS  
OLEO-RESINS MEDICINAL RESINS

## CHAMOMILE OIL

(Distilled from plants grown on our own Farm)

## BUCHU OIL CUBEB OIL

## APIOL GERANIOL

### WILLIAM RANSOM & SON

ESTABLISHED 1846

*Ltd.*

*Manufacturing Chemists*

HITCHIN *near* LONDON



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# Now *more than ever* is the season for **BRAND'S ESSENCE**

Thousands are convalescing after 'Flu and winter ills. Brand's Advertising and Display Material are creating maximum demand and giving you powerful support.

**STOCK & DISPLAY BRAND'S ESSENCE  
NOW**

**BRAND & CO. LTD., Mayfair Works, Vauxhall, London, S.W.8**

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# When you tender for **Disinfectants**

to Hospitals, Public Institutions, Local Councils, &c.  
REMEMBER that

**BURT, BOULTON & HAYWOOD LTD.** Managers to  
the **PRINCE REGENT TAR COMPANY, LTD.**

give you special terms for contracts.

Carbolic Disinfecting Fluids containing 3% to 80% Tar Acids.

White Disinfecting Fluids—miscible in salt, fresh or brackish water, Co-efficients 10/12, 18/20, 20/22, 24/26.

Lysol B.P. Quality. Pine Disinfecting Fluids.

Pink Carbolic Disinfecting Powders containing 5% to 20% Tar Acids.

Carbolic Sheep Dips, approved by the Ministry of Agriculture under the Sheep Scab order.

Tar Acids and Rideal Walker Co-efficiency guaranteed.

May be sold by Chemists and Druggists under own name.  
Special Disinfectant Fluids approved by the Ministry of Agriculture under the "Diseases of Animals Acts." May be packed and sold by Chemists under own name.

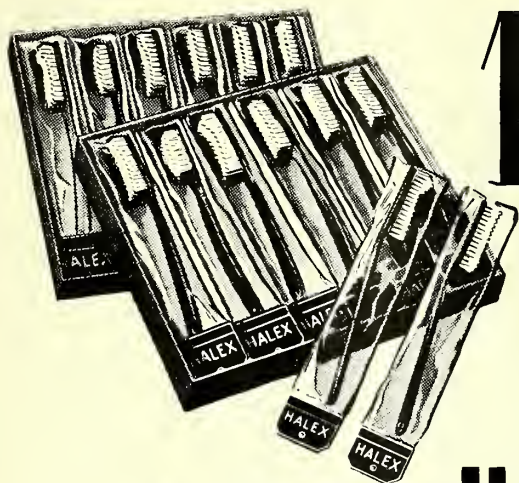
SAMPLES AND PRICES ON APPLICATION TO

**PRINCE REGENT TAR COMPANY, LTD.**

(Managers: **BURT, BOULTON & HAYWOOD, LTD.**)

**BRETENHAM HOUSE, WELLINGTON STREET, STRAND, LONDON, W.C.2**  
Phone: Temple Bar 5901 (5 lines)      Telegrams: "Burboul, Rand, London"





★  
**14 TO THE DOZEN**  
**UNTIL MARCH 25<sup>TH</sup>**  
 ★

**WITH THE HALEX BONUS OFFER YOU  
 MAKE 75% PROFIT**

All you need do is order Halex toothbrushes—and back come two FREE brushes with every dozen. You must order in level half-dozen of hard or medium, and your total order must be at least three dozen. The offer closes on March 25th.

### **ONE CONDITION—AND IT HELPS YOU SELL MORE!**

To get your share of the Bonus offer, you merely undertake to display the showstand on your counter for a fortnight, beginning not later than March 27th. The stand is an effective salesman—it shows all the Halex brushes to advantage, reminds your customer to buy from you.

**Bigger advertising than  
 ever this year—and bigger  
 HALEX sales for you**

Attractive advertisements in the *Daily Mirror*, *Daily Sketch*, *Picture Post*, *Illustrated*, *John Bull*, etc., tell your customers how to increase their charm with the famous **HALEXERCISE**.

### **This simple sum means big profits**

If you order a gross of Halex shilling brushes, you pay 96/-. But instead of 144 brushes the bonus offer gives you 168. You sell these at 1/- each. The brushes that cost 96/- bring in 168/-. A profit of 75%.

★

order **HALEX** now  
 from your usual wholesaler!  
 or from

**HALEX LTD • HALE END • LONDON • E.4**

*The word HALEX is a registered Trade Mark*



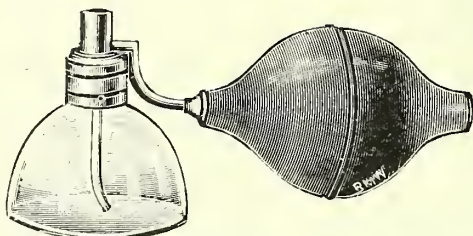
## THREE POPULAR ATOMISERS

AT REDUCED PRICES

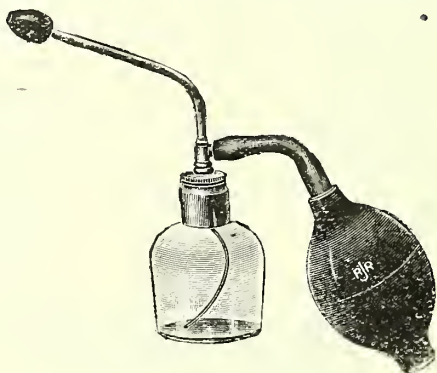
BRITISH MANUFACTURE



No. 45. For NOSE or THROAT. 19/- Doz.  
May be used for oily or aqueous solutions  
SCREW NECK BOTTLE



No. 39. CLOUDIZER TYPE, for NOSE  
Grey Bellows. 27/- Doz.  
For oily solutions only  
SCREW NECK BOTTLE



No. 8. For NOSE or THROAT  
Grey Bellows. 36/- Doz.  
May be used for oily or aqueous solutions  
SCREW NECK BOTTLE

**BRITTON MALCOLM & WAYMARK LTD.**

38 SOUTHWARK BRIDGE ROAD, S.E.1

Telephone :  
Waterloo 4874 (3 lines)

Telegrams :  
"Clinbritic, Boro, London"

TO MANUFACTURERS OF  
PHARMACEUTICAL AND  
BEAUTY PRODUCTS

## ARE YOU SATISFIED WITH YOUR DISTRIBUTION ?

Capable representatives visiting every chemist, detail men calling upon doctors, display experts installing window shows, fully-equipped laboratories with manufacturing and packing facilities, a special statistical department supplying full details of Sales and Advertising returns in each district . . . such is the organisation I propose to create in England. It will be available to a limited number of products. My record in France, where my organisation, as described above, has been responsible for the success of many world-famous specialities, speaks for itself. Would you be interested in sharing the success I confidently anticipate in my own country? Write or telephone for an appointment: J. E. Cross, Brettenham House, Lancaster Place, W.C.2. Temple Bar 6786.



Some of the products distributed by me in France which have become household words in that country.

KRUSCHEN SALTS DIGESTIF RENNIE  
DOCTOR WILLIAMS PINK PILLS  
KARSWOOD DOG POWDERS  
MILTON TAMPAX

Yesterday in France—To-day in England

English  
Filter  
**POSTLIP**  
Papers

SQUARES  
CIRCLES  
FOLDED  
ROLLS

WHITE  
GREY  
PLAIN  
ANTIQUE  
EMBOSSED  
CRINKLED

SAMPLES  
FREE

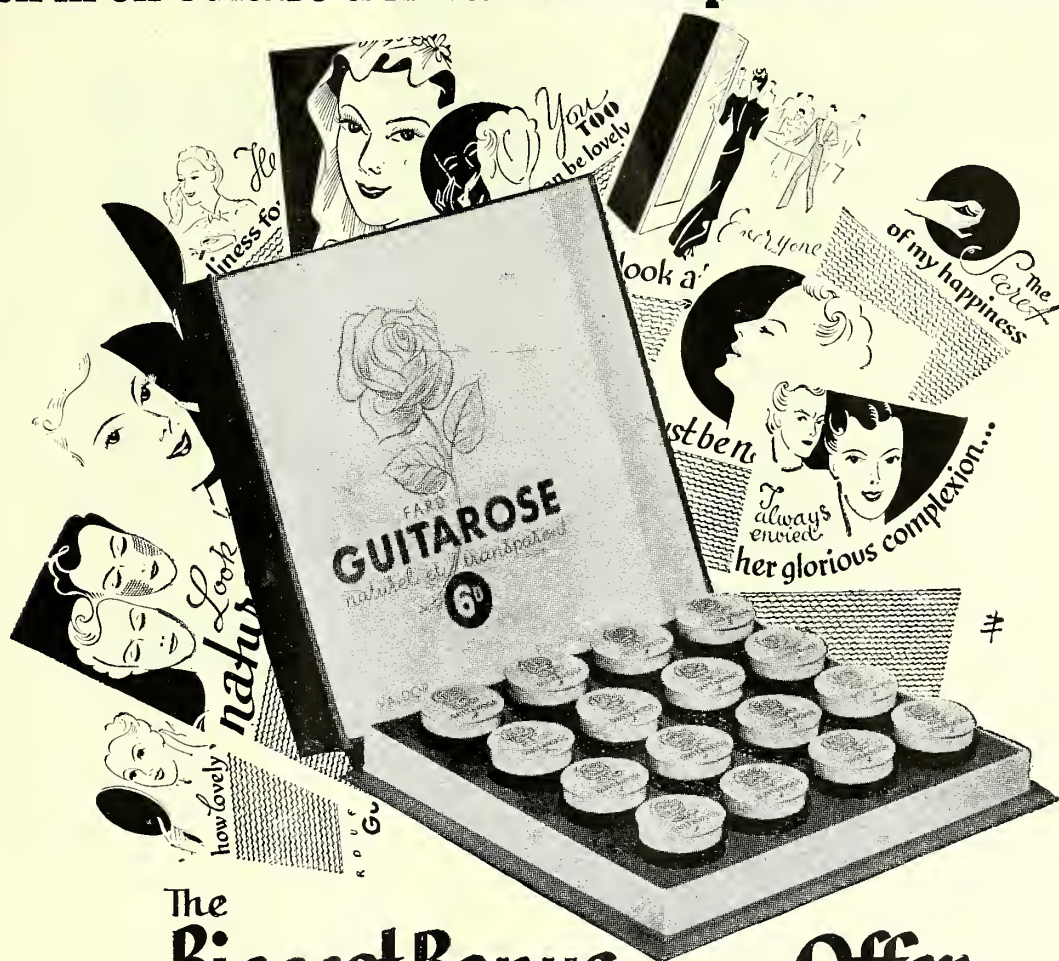
Postlip Filterings are stocked by all the leading Wholesale  
Laboratory Dealers.



*Evans, Adlard & Co Ltd*  
Postlip Mills, Winchcombe, Cheltenham



# Cash in on Guitare & Arcancel triumphs with GUITAROSE



## The Biggest Bonus Offer ever made to Retailers on a Nationally advertised Line!

Here is GUITAROSE—another winner from Valdor, Paris, creator of GUITARE Lipstick and ARCANCIL Mascara, the two most outstanding cosmetic successes of 1938. GUITAROSE is a TRANSPARENT Rouge that blends perfectly, actually improves the texture of the skin, and stays on all day. The beautiful GUITAROSE pack has a transparent base and white cap engraved with a red rose, and reaches you in one dozen carton boxes, or in display boxes containing the full range of 16 delicate, fashionable shades, corresponding with the 16 shades of GUITARE Lipstick.

The success of GUITAROSE is assured in advance. Selling at 6d., this new Rouge, with GUITARE Lipstick, puts a "matched make-up" within the reach of every woman and girl in the country. Advertising is planned to commence at once in National Daily and Sunday Newspapers and Women's Magazines. Until March 31st, 1939, every retailer ordering not less than 4 dozen or more than 12 dozen GUITAROSE direct from the Distributors will receive a bonus of 16 to the dozen—4 FREE packs for each 12 ordered! This offer applies only to complete display boxes of one each of the 16 shades. Only one order from any retailer can be filled on these terms. Order NOW and get your full share of the profits that are waiting!

## Stock, Display and SELL GUITAROSE!

*All particulars and attractive Display Material may be obtained from the Distributors:*

**CHEMICAL & NATURAL PRODUCTS LTD.**

WIMBLEDON FACTORY ESTATE, MORDEN ROAD, LONDON, S.W. 19

Daily Mail



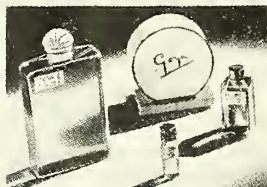
## Now you can afford luxury perfume!

Even your conscience can afford costly expensive perfume in this new way! For Goya, creator of luxury scents for the world's leading couturiers, offers you in attractive hand-painted phials costing only one shilling, exactly the same rare and exclusive perfumes that he normally sells in two guineas. Every fragrant drop is created, blended, made for you by Goya himself, with that finesse and subtlety that is captured only by



the great artists in perfume; and because his exquisite scents are so concentrated each little phial lasts for several weeks. Be as extravagant as you have always longed to be in this new, inexpensive way. Indulge today in a genuine Goya perfume! Choose from a captivating, real GARDENIA, STUDIO - an enchanting new creation; or Goya's intriguing "IND. S." They fit your bag, your purse, your mood!

TWO GUINEAS • SIX AND SIXPENCE • ONE SHILLING



**Goya**

PICCADILLY  
LONDON, W.1

**This front page**

of the Daily Mail will appear next Friday, March 10th. It is the opening shot in Goya's great 1939 National advertising campaign, which continues on a record scale right through until Christmas. Order Goya perfumes NOW! They are the proved best sellers★ and carry a full 33½% profit.

★ Last year, with far less advertising, Goya's sales showed a steady monthly increase of 30%!

1/- phials ... 8/- per dozen  
6/6 bottles ... 52/- per dozen  
2 gn. flacons ... 28/- each  
Obtainable from all wholesalers; or direct post free less 7½% discount for cash (with order or on delivery). Display material free on request.

**G O Y A , P I C C A D I L L Y , L O N D O N , W . I**  
No postage or cash on delivery fees charged to customers, however small their order





Difficult  
CHIN

The Ju  
is the smooth urbanity of  
ers of our judicature that  
part from all other mortals  
ur law its majesty. That  
idicial chin must be shaved  
smoothly, easily. For w  
England stand with sore, b  
ne-wigged and be-ermin

9<sup>d</sup>  
VINOL  
SHAVING ST

★ REFILL STIC

Use Vinolia Talcum after shaving  
finishing touch. 1/3 a large  
VINOLIA Co., Ltd., LONDON.



Women  
who attract

When you say that a woman is attractive  
you do not necessarily mean that she  
good looking or smart, or that she  
expensively. So many beautiful  
dressed women fail to be  
one quality you will always  
popular and attractive  
quality which men especially  
essential to feminine charm.  
daintiness—an air of freshness

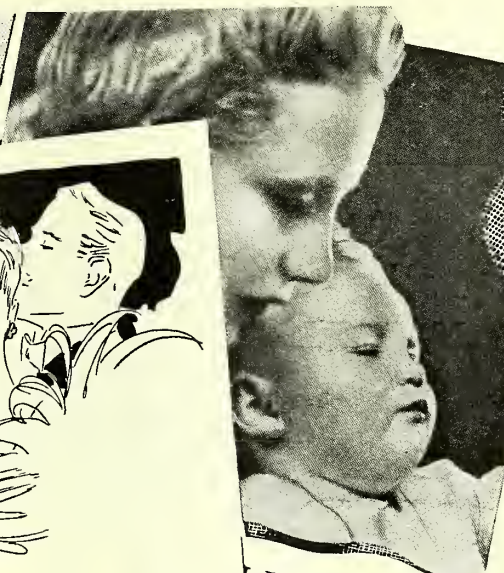
The surest way to achieve that air  
Vinolia. This exquisite beauty  
a deep lasting fragrance with a m  
its own—a fragrance which is inde  
essence of springtime freshness.  
you use Vinolia and that fragrance  
vades you, that all important air of fre  
ness is yours—the whole day through

VINOLIA

The soap that freshens you  
6<sup>d</sup> A LARGE TABLET

Carton of 3 tablets 1/6

For soft, dewy lips all winter through use  
LYPSYL—white, red or cerise. Neat bakelite  
tube 6d—but insist on Vinolia  
VINOLIA Co. Ltd., LONDON NV202/118



TAKE A 7  
FROM BAB

After all, who has the  
complexion in the  
Baby, of course. And  
is her beauty secret?  
this: wash regularly with  
pure, extra-emollient  
Try baby's beauty hint y  
self. Use Vinolia for a w  
and see how much smoo  
and finer your skin becom  
when you use a soap th  
soothes and nourishes  
as it cleanses, and refreshe

Large long-lasting tablet - 6d.  
Three tablets in Carton - 1/6  
Vinolia Company, Ltd., London

NV 108/36r

THREE  
CAMPAIGNS

- AND EACH A PROVED  
WINNER

Not the biggest in the paper per-  
haps, but there are lots of them—and  
they catch the eye.

One campaign to younger women,  
one to mothers for Vinolia Soap and  
one to men, for Vinolia Shaving  
Stick. And each proved a winner,  
bringing increased business every  
month to the retailer who links up,  
and gives Vinolia good displays.  
May we send you our latest display  
material?

VINOLIA Co., Ltd., BEBINGTON, WIRRAL, Ches.



# SANIDENT



## DENTURE CLEANSER

Sanident Denture Cleanser is prepared and packed in the countryside under ideal conditions of hygiene. Only an efficient and economical modern plant could produce Sanident so inexpensively.

Three different factors contribute towards its success :

1. The extra large bottles of pure perborate cleanser.
2. The striking modern package with leaflet enclosure.

3. The generous margin of profit for the Chemist ... 6d. on every 1/3 bottle.

### 66% Profit on Cost

Sanident is sold only through Chemists. If you are not yet selling this excellent product, please write for a sample bottle, and particulars of free gift offer. Then judge its purity and value for yourself.

As a potential source of genuine customer satisfaction and ready sales, Sanident is without equal as a Denture Cleanser.

Attractive Display material is available

**THORNTON & ROSS LIMITED, Manufacturing Chemists**  
**LINTHWAITE, HUDDERSFIELD**





## A PROFITABLE RANGE FOR 1939

**T**HOUSANDS of wise people gave their friends **Ebe** gifts last Christmas. These attractive and originally packed designs make them easy sellers throughout the year, for **Ebe** becomes a delightful habit. In fact, you need only display **Ebe** lines and they sell themselves.

**PRICES**—Bath Powders 2/-. Bath Confetti 3/6, 5/9, 10/6. Bath Flowers 2/-. 3/9, 5/-. 10/6. Bath Milk 2/6, 4/6, 6/6, 10/6. Bath Powders (in "Cellophane" Tubs) 2/6, 6/6; (in Bowls) 15/6; (in Small Jars) 4/6, 8/-. 15/6; (in Large Jars) 30/-; 2/6 Guest Box. Dusting Powder 3/6.



**STOCK UP NOW WITH**  
— A fine investment. Good profits  
and a quick turnover!





# Pears GIFT

## TIE UP WITH PEARS GREAT NATIONAL ADVERTISING CAMPAIGN

Big Space Advertisements are appearing in all these newspapers and magazines:—

THE LATEST DISNEY MASTERPIECE  
**SHUFFLED SYMPHONIES**  
1/6 CARD GAME FOR ONLY 6

IF YOU BUY 2 TABLETS of PEARS GOLDEN GLORY

Ask for PEARS GIFT BOX

26<sup>th</sup> MARCH 1939

OVER 2,000,000 FAMILIES WILL SEE THIS FULL PAGE IN THE DAILY HERALD MARCH 17<sup>th</sup>

**NATIONAL DAILY PAPERS**  
Daily Herald (Full page)  
Daily Mail  
News Chronicle  
Daily Mirror  
Daily Sketch

**SUNDAY PAPERS**  
News of the World  
People  
Sunday Express  
Sunday Pictorial  
Reynold's News

**LONDON EVENING PAPERS**  
Evening News  
Evening Standard  
Star

**NATIONAL MAGAZINES**  
Picture Post  
Illustrated  
John Bull  
Mickey Mouse Weekly  
Farmer's Weekly

**WOMEN'S MAGAZINES**  
Woman  
Mother  
Wife and Home  
Mother and Home  
Woman's Pictorial  
Woman's Own  
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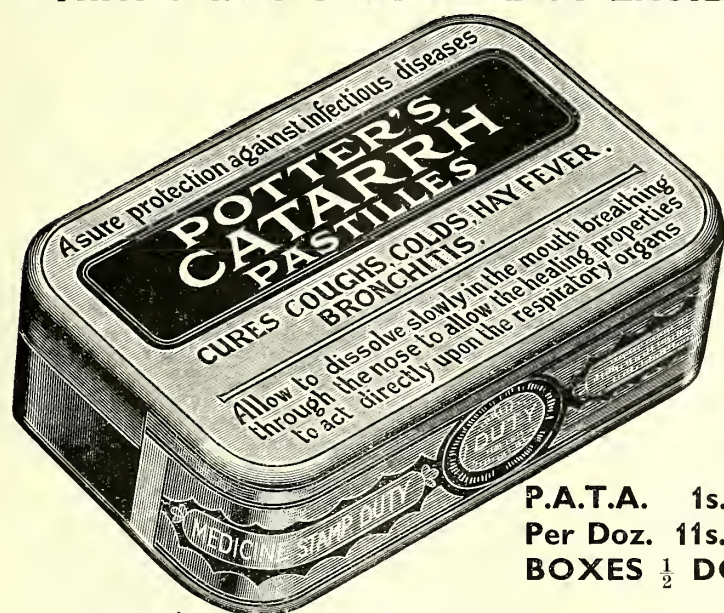
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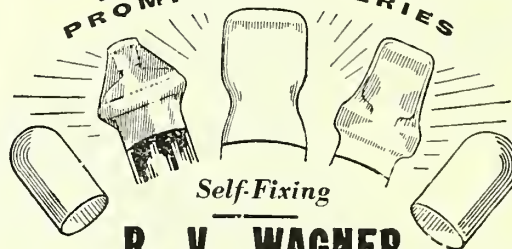
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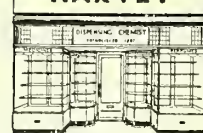
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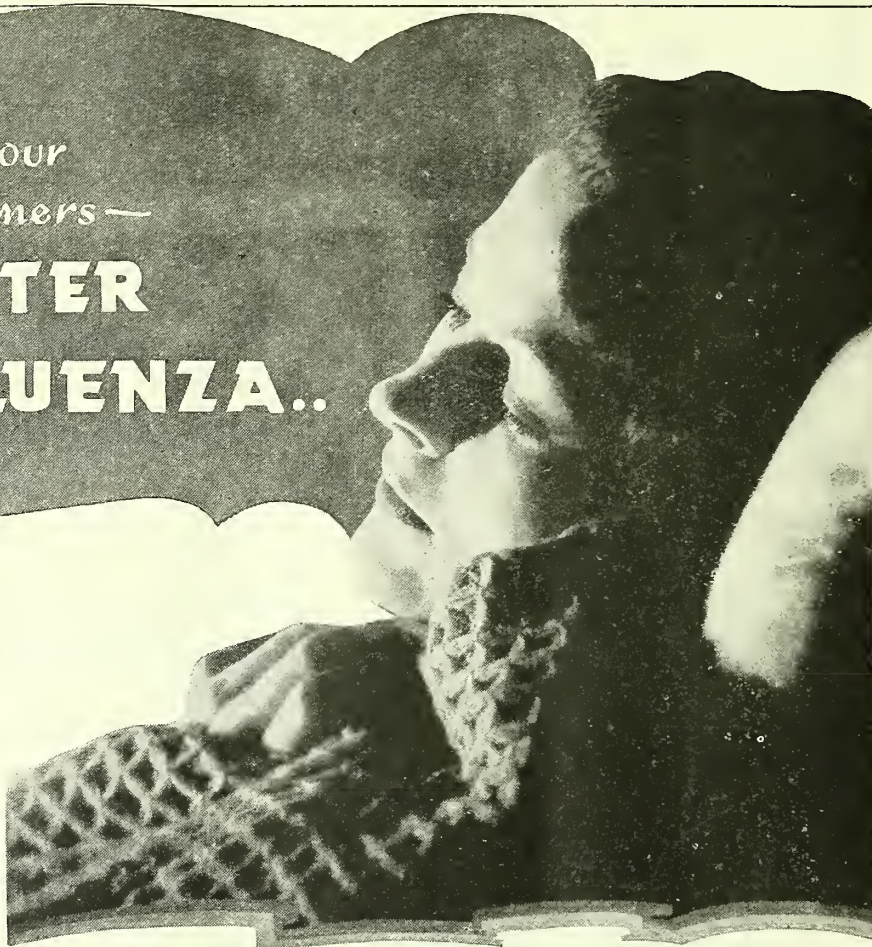
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## News of the Week

### Business Changes

MR. F. H. BURSELL, M.P.S., 17 Plashet Grove, Upton Park, London, E.6, has taken over the business of Williams Drug Stores, 196 Shrewsbury Road, Forest Gate, E.7.

MR. JAMES D. KERR, M.P.S., has taken over the business of Mr. William E. Smith, M.P.S., 2 St. Andrew's Buildings, Hamble, Southampton.

MR. GRIFFITH T. DAVID, M.P.S., formerly of 99 Mansel Street, Swansea, has opened a pharmacy at 1 Cradock Street under the style of Griff. T. David & Son. Mr. David's son, Mr. G. T. M. David, M.P.S., is manager.

### Royal Visit to B.I.F.

On February 27, Their Majesties King George and Queen Elizabeth paid a visit to the British Industries Fair, Olympia. In the course of their itinerary they visited the chemical section and inspected the products shown on a number of stands. Amongst the exhibitors who were thus honoured were The British Drug Houses, Ltd., W. J. Bush & Co., Ltd., Howards & Sons, Ltd., Monsanto Chemicals, Ltd., Thomas Tyrer & Co., Ltd., and Whiffen & Sons, Ltd.

Spencer Bros. advise us that Her Majesty Queen Mary and H.R.H. the Princess Royal visited their stand in the chemists' sundries section and purchased a number of the firm's toilet companions.

### Proprietary Articles Trade Association

**ADDITIONS TO PROTECTED LIST.**—*Macleans, Ltd.*, Maclean brand stomach powder, 1s. 3d., 11s. 6d. doz.; 2s., 18s. doz.; 5s., 45s. doz.; tablets, 1s. 3d., 11s. 6d. doz.; 2s., 18s. doz.; 5s., 45s. doz.; 9d., 7s. doz.; 6d., 4s. 6d. doz. Fynnon salt, 1s. 3d., 11s. 6d. doz.; three doz., 11s. doz.; six doz., 10s. 9d. doz. Macleans peroxide tooth paste, 6d., 4s. 6d. doz.; six doz., 4s. 3d. doz.; 10½d., 8s. doz.; six doz., 7s. 5d. doz.; 1s. 6d., 13s. 6d. doz.; six doz., 12s. 6d. doz. Macleans peroxide tooth powder and solid dentifrice, 6d., 4s. 6d. doz.; six doz. 4s. 3d. doz. A mixed six-doz. parcel of any two sizes of tooth paste qualifies for the quantity terms, and if any quantity of the remaining size of tooth paste or solid dentifrice or tooth powder is ordered in addition, this qualifies for similar quantity rates. The quantity terms are available either direct or through members of the P.A.T.A. (wholesale section). *Macleans, Ltd.*, pay carriage on all orders value £1 and upwards. The prices given apply to Great Britain and Northern Ireland.

**ALTERATIONS.**—*Lucozade, Ltd.* (sole selling agents, *Macleans, Ltd.*), Lucozade, 2s., 19s. doz.; quantity terms (for retail chemists only): 1 doz., 18s. doz.; three doz., 17s. 6d. doz.; six doz., 17s. 3d. doz. The quantity terms are available either direct or through members of the P.A.T.A. (wholesale section).

**DELETION.**—*Millhouse & Roberts*, Blinblow asthma cure and cigarettes.

### Holidays with Pay

The Brush and Broom Trade Board (Great Britain) give notice in the "London Gazette" (February 28) that they propose (a) to issue a direction to provide for holidays with pay and (b) to vary minimum rates of wages.

Particulars of the proposals may be obtained on application to the Secretary of the Trade Board at the address given below.

The Trade Board will consider any objections to the above-mentioned proposals which may be lodged with them within two months from February 28, 1939. Any such objection should be in writing, signed by the person making the same (adding his or her address) and sent to the secretary, Brush and Broom Trade Board, Metropole Buildings, Northumberland Avenue, London, W.C.2. It is desirable that persons making objections should state the precise grounds of their objections.

### Birmingham

**P.D.A. LECTURE.**—Under the auspices of the local branch of the Photographic Dealers' Association a lecture was given, on February 21, by Mr. J. E. Saunders on "Helping the Customer." Various accessories and examples of new apparatus were shown, and 8-mm. cine films in colour and monochrome, and some slides in colour, were screened.

**PRIZEWINNERS AT GOLF.**—The Birmingham Pharmaceutical Association, golf section, held its annual dinner-dance and presentation of trophies at Perry Barr, on February 22. Mr. E. W. Mann (chairman, Birmingham Branch of the Pharmaceutical Society) accompanied by Mrs. Mann, presided, and some hundred sat down to dinner. Mr. F. C. Harvey Foster (chairman of the golf section), who proposed the toast of the Association, congratulated it on the enthusiastic and efficient manner in which the preparations were going forward for the British Pharmaceutical Conference to be held in Birmingham this year, and pledged the whole-hearted support of the golf section. Mr. Mann suitably replied, enumerating a number of attractive arrangements already made for the Conference and thanking the golf section for its support. He also made the statement that the Birmingham Association was the second oldest provincial branch of the Society. Mr. J. Frost (captain), proposing the toast of the donors, drew attention to the high standard of play of members; each competition had been won with an average score of 3½ strokes below bogey. Birmingham had again been successful in the annual match with Manchester pharmacists for the B.D.H. trophy, and Mr. Frost issued a challenge to London pharmacists to meet them in a match on a suitable course midway between the two cities. Mr. A. V. Sorge struck a humorous note in his reply. The important

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event of the evening was the presentation of a gold watch, suitably inscribed, to the secretary (Mr. Fred. J. Green) by Mrs. J. Frost, on behalf of the members of the golf section, and a bouquet of flowers to Mrs. Green. In acknowledgment, Mr. Green said he and Mrs. Green were touched by the expressions of appreciation. The golf section was within a few days of the tenth anniversary of its inception. During an interval in the dancing that followed, Mrs. Mann, assisted by Mr. Mann, distributed the trophies, the prizewinners being Messrs. T. H. Martin (Ucal cup); J. Mossman (Robert Spargo's prize, Andrews' salver and C. H. White's prize); J. L. Sloan (Coty cup); J. Frost (Potter & Moore cup); L. H. Lester (Burgoyne cup); Wm. Rowley (Association cup and Cuxson's bowl); E. E. Jones (Southall cup); F. J. Green (W. O. Payne prize); W. O. Payne (Frank L. Dent's prize); and the Mesdames L. H. Teare (F. W. Dunnett's prize); F. W. Dunnett (A. V. Sorge's prize); R. H. Nix (captain's prize and Southall cup replica); D. G. Horton (Association cup); and R. O. Busby (section prize). A portrait of Mr. F. J. Green appears on page 229.

### Coventry

**COMBINED MEETING.**—A combined meeting of the Coventry and Warwickshire Branches of the Pharmaceutical Society and National Pharmaceutical Union held at Leamington Spa on February 23, was addressed by Miss B. Sharples (assistant secretary, N.P.U.). Miss Sharples summarised the work of the Union, and her address was followed by questions and discussion. The growing use of highly priced "ethical" proprietaries in Insurance dispensing was deplored, as was the insufficient margin of profit on such articles, even on private prescriptions. Miss Sharples said the N.P.U. had been in touch with manufacturers with a view to obtaining at least 33 per cent. profit on these lines, but the manufacturers took the line that chemists should charge a dispensing fee; members knew this was "easier said than done." A vote of thanks was proposed by Mr. G. R. Williamson and seconded by the chairman of the N.P.U. Branch (Mr. F. B. Wooddisse). After the meeting members adjourned to the Pump Room for tea.

**LECTURE ON SULPHONAMIDES.**—Mr. G. Pinchbeck, Ph.C. (Wyleys, Ltd.), gave an address to the Coventry Branch of the National Pharmaceutical Union on "The Sulphonamides" on February 15. He referred to the early work of Horlein (1910), who investigated dyes for textile purposes and found that azo dyes containing a sulphonamide group strengthened the mordant action, and Eisenberg (1913), who showed that in test-tube experiments the azo compounds possessed a relatively powerful bactericidal reaction. A quarter of a century later Domagk, he said, working in the laboratories of the I.G. Farbenindustrie, made the discovery that 4' sulphamido-2:4-diaminoazobenzene (Prontosil rubrum) exhibited a pronounced curative action in streptococcal infection in mice and rabbits. Research undertaken at the Pasteur Institute under the direction of Fournieu later furnished evidence to show that one of the products of the disintegration of Prontosil rubrum was *p*-aminobenzenesulphonamide which had an antistreptococcal action, and the conclusion was reached that this group constituted the active nucleus of the compound and its derivatives. Mr. Pinchbeck dealt at some length with the pharmacology and reactions of the sulphonamides and discussed the relationship between their chemical structure and streptococcal activity. After references to the method of testing the chemotherapeutic activity, Mr. Pinchbeck concluded by outlining the measures recommended to be adopted for the prevention of toxic effects. Mr. O. T. Hall presided, and a vote of thanks was proposed by Mr. G. R. Williamson.

### Eastbourne

**CONFERENCE RESOLUTIONS DISCUSSED.**—At a meeting of the Eastbourne Branch of the Pharmaceutical Society, held recently, Mr. George C. Harmer (vice-chairman) presiding, the following resolutions proposed for submission at the British Pharmaceutical Conference, Birmingham, were discussed:—(1) That the annual registration fee be increased to two guineas and a donation of 2s. be allotted to the Society's Building Fund from each member. The idea underlying this suggestion was the difficulty or probable difficulty of obtaining sufficient subscriptions to make up the £25,000 required for the new building fund and the unsatisfactory character of a charitable appeal for what should be a business matter. It was suggested that the increased fee should be reduced in a few years' time, but the general opinion was that once the subscription was raised

it would not be again lowered. Finally it was agreed that a committee should be formed at the next meeting of the Branch with the object of raising a contribution from local members. (2) That the title "Pharmaceutical Chemist" be available to all holding the qualification of a chemist and druggist. Those who had not earned it did not like the idea of "filching" it from those who had gone to the trouble and expense of obtaining it, but the title was thought to be the one that best expressed the business of the holder. A suggested resolution as to Conference delegates' expenses was negatived.

### Hull

**HULL STUDENTS' WHIST DRIVE.**—The annual whist drive of Hull Pharmaceutical Students' Association was held on February 9. Prizewinners were Miss P. Harrison, Mrs. Dalton, Mrs. McGregor, Mrs. S. T. Boyce, Mrs. Reeder, Miss N. Clegg, Mrs. Whitehouse, Mr. Barraclough, Mr. Foster, and Mrs. A. E. Davies. Those responsible for the arrangements were Miss N. Clegg (president), Miss E. Safford (vice-president), Miss N. Willey (minute secretary), Miss R. Williams (treasurer), Mr. D. E. Davies (secretary), and a committee comprising Miss I. Callicott, Miss M. Levy, and Mr. A. Jennison. Among those present were:—Mr. H. Bays (president, Hull Chemists' Association) and Mrs. Bays, Miss F. Sawyer, Mr. and Mrs. E. A. Brocklehurst, Mr. and Mrs. Palmer, Miss Palmer, Mr. and Mrs. Allen, Mr. and Mrs. C. A. Hewitt, and Mr. and Mrs. Dalton.

**CHEMISTS' WORK AND NATIONAL SERVICE.**—The fact that the work of chemists was always national service was stressed by Mr. F. W. Adams (assistant secretary, the Pharmaceutical Society), speaking at the annual dinner of the Hull Chemists' Association and Branch of the Pharmaceutical Society, at Hull, on February 17. During the dinner Mr. Harold Bays (president) announced that the Hull chemists who had taken a course in A.R.P. first aid had passed with 100 per cent. successes. Mr. Bays also said that seventy years ago a few chemists in Hull had founded the Association to further their ideals in pharmacy. To-day they still cherished those ideals. The general public did not realise that the standard of drugs and chemicals used in medicine to-day was considerably higher than was thought attainable a few years ago. The Pharmaceutical Society had passed through its growing pains under the new constitution and was finding its feet; under the old voluntary system the Society was regarded as a benevolent old uncle, but now, with its supreme authority and inspectors, he was afraid members were inclined to think of it as a stern parent ready to chastise. It was to be hoped that some effort would now be made to secure the co-ordination of all the pharmaceutical services in the country.

Among the eighty guests were Dr. and Mrs. L. F. Wilson, Mr. and Miss Lewenstein, Mr. Barmforth (head of chemistry department, Hull Technical College) and party, Mr. K. C. Clappison (secretary), Mr. and Mrs. Edwards, Mr. H. Ringrose (social secretary) and Mrs. Ringrose, Mr. E. A. Brocklehurst (senior vice-president) and Mrs. Brocklehurst, Mr. W. E. Naylor (vice-president) and party, Mr. and Mrs. E. Hindle, Mr. and Mrs. A. F. Cluff, Mr. and Mrs. C. A. Hewitt, Mr. and Mrs. S. T. Boyce, Miss N. Clegg (president, Students' Association), Mr. and Mrs. R. B. and Miss T. Sawyer, Miss Vokes and party, Mr. and Mrs. Miss Palmer, Mr. and Mrs. J. Allan and party, Mr. and Mrs. Tebb, Mr. B. Foster, Dr. Drummond, Mr. A. Surfleet (a past president), Mr. and Mrs. H. S. Smart, and Mr. R. Stephens.

### Leicester

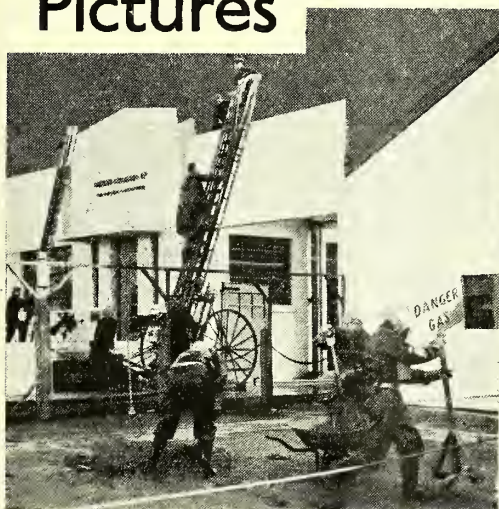
**REUNION.**—The fourth annual reunion supper and dance of pharmacy students of the Leicester College of Technology and Commerce was held recently. Mr. Colin Gunn (lecturer in the pharmacy department) was in the chair. "The Visitors" was proposed by Councillor C. R. Keene (vice-chairman, Leicester Education Committee), and Mr. Thomas Guthrie (president of the Pharmaceutical Society), who during the afternoon had inspected the school's new laboratories and rooms, and been entertained to tea by the pharmacy staff and principal of the College, said in his reply that in the old days education was not so easily obtained as now. He hoped students would ask themselves what would be expected of them to-day, after such a magnificent start. Mr. E. N. Balmforth (vice-principal of the College) proposed the "Old Lags" (former students of the College) and Mr. A. Buswell (a former student) replied. Mr. Guthrie was presented with a souvenir book, bound by Mr. J. Mason (School of Art), containing photographs of members of the College staff.





**LEICESTER PHARMACY SCHOOL REUNION**—Mr. Thomas Guthrie (president, Pharmaceutical Society) among guests at fourth annual reunion of Leicester School of Pharmacy. (Report on opposite page).

## News in Pictures

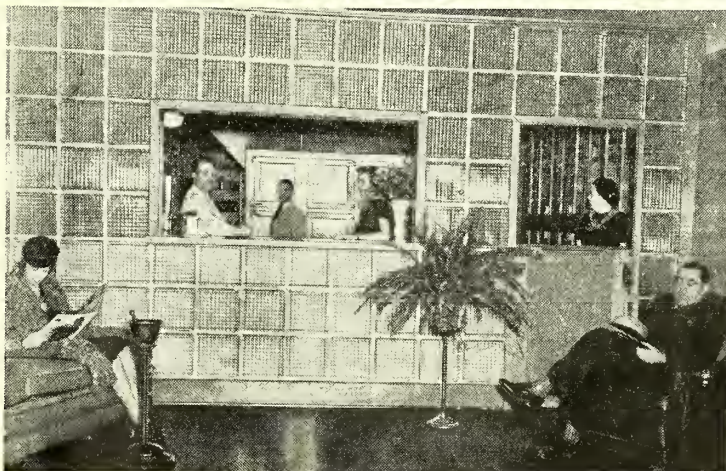


**Above, left: WORKS A.R.P. UNITS**—Full-dress rehearsal by two Auxiliary Fire Units composed of workers at British Colloids, Ltd., Park Royal, London, N.W.10



**Above, right: STILL MOTOR-CYCLING AT SEVENTY**—Mr. J. D. Rose, M.P.S., Jarrow-on-Tyne, oldest local magistrate, awheel.

**Right: U.S. DISPENSING DEPARTMENT**—Lobby and glass-bricked dispensary of a pharmacy at Dallas, Texas. Twelve persons are employed and 7,000 professional items stocked.



**MR. A. E. FOOTITT, Ph.C.**, who has been appointed pharmacist to the Royal Northern Group of Hospitals in succession to Mr. Herbert Skinner, Ph.C. Mr. Footitt served his apprenticeship with Mr. J. H. Hart, Ross-on-Wye, and qualified in 1929 from the Central Technical College, Birmingham, taking his Ph.C. at a later date.



**MR. F. J. GREEN** (secretary of the golf section, Birmingham Pharmaceutical Association) to whom a presentation has been made. (See page 227)



**MR. D. G. POUR, Barbourne, Worcester**, who celebrates this year his silver jubilee as member of the County Pharmaceutical Committee. (See page 241)



Messrs. L. Kershaw (principal of the College) and K. Holmes (principal, College of Art), C. Robert Keene (chairman, College Committee), W. Oram (vice-chairman, College Committee), F. M. Drewery (College registrar), Colin Gunn (lecturer in pharmacetics) and Colin Melville (lecturer in pharmacognosy) were among those present. A humorous interlude followed entitled "Pharmaceutical Medley," in which old students holding different types of pharmaceutical post delivered rhymes about their own jobs, each being introduced by a suitable tune. Among the visitors was Dr. Isabella Purdie, now a resident physician at Little Bromwich Hospital, Birmingham, but at one time an Edinburgh pharmacist. The toast of "The Old Lags" was proposed in witty fashion by Mr. E. N. Balmforth, vice-principal of the College of Technology, and the response was made in equally humorous manner by an "Old Lag"—Mr. A. Buswell.

### London

**WEST LONDON'S BENEVOLENT FUND DANCE.**—The West Metropolitan Branch of the Pharmaceutical Society held their second dance in aid of the Society's Benevolent Fund on February 16. Some 120 members and friends were present, the M.C. being Mr. Frank Noble. A cheque for over £20 is being sent for the Fund.

**BUSINESS WOMEN'S "INTERNATIONAL NIGHT."**—At the annual "International Night," on February 24, of the British Federation of Business and Professional Women, to which the National Association of Women Pharmacists is affiliated, several members of the latter were present, including the president (Miss E. B. Blundell) and vice-president (Miss Harvey).

**GASWORKS VISIT.**—A party from the Wimbledon Pharmacists' Association visited the Wandsworth works of the Wandsworth Gas Company on February 8. The visitors saw the whole process of manufacture of gas from the unloading of coal at the riverside to the finished product. Members were particularly interested in a new vertical-retort house and the purification of the waste products (ammonia, tar, benzene, etc.). After the tour, which occupied two hours, the party were entertained to tea by the management.

**SOUTHGATE AND WOOD GREEN DIVISION.**—A meeting of the Southgate and Wood Green Division of the North London Pharmaceutical Association held at Palmers Green on February 13, presided over by Mr. G. Gibson, who introduced Mr. J. C. Young (a member of the Society's Council). Mr. Young delivered a lecture on "Buildings, Old and New," illustrated by lantern slides. The lecturer traced the development of pharmacy during the eighteenth and nineteenth centuries and recalled how, under William Allen and Jacob Bell, the Society came into being. The slides included the various inns and coffee houses at which the preparatory meetings were held and were followed by reproductions of the famous portraits of the founders which adorn the Council chamber. The changes that have taken place at Bloomsbury Square were revealed in prints of nearly one hundred years ago and compared with photographs of No. 17 as it is today. Mr. Young then showed the architect's drawings of the new home of the College and Society at Brunswick Square. Mr. J. S. Jenkin proposed a vote of thanks, which was seconded by Mr. L. C. Brooks. In his reply Mr. Young appealed to members present to support the appeal which would shortly be made by the association.

**ILL-HEALTH AND HISTORY.**—A meeting of the Guild of Public Pharmacists was held on February 7, when an address entitled "Ill-health and History" was delivered by Mr. A. Clifford Morson, O.B.E., F.R.C.S. Mr. Morson said that it was common knowledge that indifferent health, whether physical or mental, affected a man's capacity for work and also his judgment. In studying the history of this country, one was struck with the fact that many famous men and women, if they had enjoyed good health, might have taken decisions that would have saved them from much unhappiness, and the nation from serious crises. It was possible the whole course of history might have been changed had not disease dogged the footsteps of certain great statesmen and generals. Mr. Clifford Morson concluded by saying that the campaign in this country for national fitness was directed to the younger generation. A healthy mind in a healthy body was equally needed for the leaders of all nations. It was sometimes difficult for the man in the street to believe that the minds of those who were trying to control the destinies of their respective countries were

as healthy as they might be. A vote of thanks was proposed by Mr. J. C. Young and seconded by Mr. J. M. B. King. The president (Mr. F. B. Royal) was in the chair.

**WEST HAM AT THE WALDORF.**—The annual dinner and dance of the West Ham and Eastern District Association of Pharmacists was held at the Waldorf Hotel, London, W.C.2, on February 23. The president, Mr. Dennis A. Desmond, Ph.C., occupied the chair. During the evening an appeal for the Benevolent Fund of the Pharmaceutical Society was made by Mr. Arthur Mortimer, and as the result of a collection the sum of £17 10s. was realised. "The Pharmaceutical Society of Great Britain" was proposed by the Mayor of West Ham (Councillor C. A. Bennett, J.P.), who, after reviewing the activities of the Society generally, said that local authorities appreciated advice from such bodies as the Society in carrying out local administration. He also emphasised the importance of rigidly enforcing restrictions on the sale of poisons. Mr. Deacon, vice-president of the Society, in reply, said chemists were privileged to co-operate with the medical profession. Referring to the National Defence Register, he pointed out that the Society had been accorded the honour of making its own register. As to the building, it was an example of the wonderful growth of the Society. Pharmacists of to-day should, like their predecessors, have vision and co-operation. The next toast was that of "The Ladies," which was eloquently proposed by Mr. M. Blumenthal, vice-president of the Association, and responded to by the Mayoress of West Ham. Mr. E. A. Atkins, Ph.C., next proposed "The Association," in the course of which he characterised West Ham as an extremely live body which had never been afraid of criticising, but its criticism had always been of a constructive nature, so that it afforded help and guidance to bodies like the Pharmaceutical Society and the National Pharmaceutical Union. It was, in fact, due to criticism by West Ham of the Local Association's Executive that led to the formation of the National Pharmaceutical Union. In conclusion, he paid tribute to many of the well-known men who had been associated with West Ham, including the late Mr. Kirkpatrick and their present secretary, Mr. J. Reed, who is also chairman of the West Ham Insurance Committee. Responding, Mr. Desmond said West Ham exerts a powerful influence in the maintenance of pharmacy in the area, and chemists should be able to play an important part in first-aid and defence in chemical warfare. Much of the chemist's legitimate merchandise was sold by other traders, and propaganda was needed in the Press to make the public chemist-minded. He congratulated the N.P.U. on putting an end to discounting, and hoped that in regard to the new headquarters of the Pharmaceutical Society the West Ham Association would be in the vanguard of donors to the fund. In conclusion, he paid tribute to several who had been associated with the Association, including Mr. Reed, the secretary. Mr. Blumenthal and Mr. Maxey. Dancing commenced about 9.30, and in the course of the evening there was a cabaret.

Among those present were Mr. and Mrs. Winchester, Mr. and Mrs. Hewlett, Mr. and Mrs. Howells, Mr. and Mrs. McNeal, Mr. and Mrs. Skinner, Mr. and Mrs. D. W. A. Desmond, Mr. and Mrs. Deacon, Mr. and Mrs. C. A. Clark, Mr. and Mrs. Mortimer, Mr. and Mrs. Glover, Mr. and Mrs. Thompson, Mr. and Mrs. Yardley, Messrs. E. A. Atkins, B. W. E. Beard, W. Main, W. E. Gaze, W. J. Beardsley, F. R. Maxey, T. W. Forster, S. A. Evans, and C. R. Pennington.

### Manchester

**JUNIOR BRANCH WHIST DRIVE.**—A whist drive organised by the junior branch of the Manchester Pharmaceutical Association was held on February 23, when the prize-winners were Mrs. Guest, Mrs. Auger, Miss Bamber and Mr. E. Walters. The prizes were presented by Miss I. Roberts (vice-president), and a vote of thanks to the donors of the prizes (Mr. Harding, Miss Morrison, Mr. Cronin and Mr. Thorpe) and to Miss Roberts was proposed by Mr. E. Barker.

**N.P.U. BUSINESS MEETING.**—The annual meeting of the Manchester and Salford Branch of the National Pharmaceutical Union was held on February 16, Mr. A. E. Thorpe in the chair. The secretary (Mr. T. Miller) presented the report of the executive, which indicated that much useful work had been done. The treasurer (Mr. G. H. Haines) submitted his annual report and balance sheet, which showed a slight balance in hand. Both reports were favourably commented on and adopted. The executive was then elected as follows:—Manchester: Messrs. E. Cronin, W. Gee, G. H. Haines, E. Stabler,



H. Steinman, A. E. Thorpe, J. Tomlinson, and J. W. Wood; Salford: Messrs. J. Collins, T. Cox, J. E. Edwards, and W. Wilkinson. County: Messrs. W. Edwards, T. Miller, G. V. Tyler, and W. I. Scholes. Votes of thanks were accorded to the chairman, treasurer and secretary for their services during the year, and to the auditor (Mr. J. W. Bygott), who was re-elected. The pharmaceutical committee also received a vote of thanks. Mr. W. I. Scholes (a member of the N.P.U. executive) addressed members on the work of the Union and afterwards replied to questions.

### Merseyside

**SUGGESTED GOLFING SOCIETY.**—Endeavours are being made to form a golfing society under the auspices of the Birkenhead and Wirral Pharmacists' Association. Mr. Fred Nichols (secretary) has asked golfing members of the association to let him have their views on the proposal, and if sufficient support is forthcoming a competition will be arranged to take place during the summer.

**CROSBY SHOP-HOURS COMMITTEE.**—At a meeting of the Crosby and District Pharmacists' Association held on February 6, the president (Alderman J. Allen Jones) in the chair, the secretary reported that more than forty members were attending first-aid classes arranged by the local Air-Raid Precautions department for pharmacists only. The committee had made a survey of the district in connexion with question No. 7 of the census of retail pharmaceutical businesses, and he announced the figures which had been collated from information supplied by members of the committee, every one of whom had made himself responsible for a definite area. It was resolved to form an hours committee to deal with all matters connected with hours of opening, rotas, holiday services, etc., the committee to consist of all proprietors and a representative of each company trading in the area under the Pharmacy Acts.

### Morecambe

**ANNUAL MEETING AND ELECTION.**—The seventeenth annual meeting of the Lancaster and Morecambe Branch of the Pharmaceutical Society was held in Morecambe on February 15, the retiring president (Mr. R. Swaits) in the chair. The secretary reported five meetings during the year, with an average attendance of fifteen and a total of £15 11s. as subscriptions from the branch to the Benevolent Fund, an average per head of 4s. 2d. The treasurer reported a balance in hand of over £6. Motions for submission to the Birmingham Conference were read by the secretary and discussed, Nos. 1, 5, 6, 8, 9, 11, 12, and 15 being agreed to, Nos. 2 and 13 not agreed, and no decision being arrived at on Nos. 3, 4, 7, and 10. A vote of thanks was accorded to the retiring president for his services. The following officers were elected:—*President*, Mr. H. Lewty, Lancaster; *Vice-President*, Mr. G. Cocking, Morecambe. Mr. W. A. Smith tendered his resignation from the office of secretary and treasurer, and a resolution was proposed and carried unanimously that members of the Branch wished to put on record their appreciation of his efficiency and devotion to the work during fifteen years and accepted his resignation with regret. Mr. R. Swaits, Heysham, was then elected *Secretary*. Other appointments were:—*Treasurer*, Mr. E. Houghton, Morecambe; *Committee*, Messrs. A. H. Robertson, H. E. Cuthbert and W. A. Smith, Lancaster; Messrs. R. E. Knowles, H. B. Haigh and R. Taylor, Morecambe; *Auditors*, Messrs. G. Cocking and R. Taylor. Letters were read from the secretary of the Pharmaceutical Society about the centenary building fund, and it was decided that two members of the Branch should be appointed to call on the members and secure promises of donations to the fund on the official forms issued by the Society. Mr. E. Houghton offered to call on Morecambe members and Mr. H. Lewty on Lancaster members. Mr. F. Hindle, Lancaster, gave a short address on the work of Lancaster N.H.I. Panel Committee and invited questions on its work. He outlined the methods of pricing and checking prescriptions and the disciplinary work of the committee in handling errors in dispensing. A discussion followed, Messrs. Swaits, Varty, Houghton, Smith, Cocking, Lewty and Cuthbert taking part. The meeting closed with a vote of thanks to Mr. Hindle.

### Portsmouth

**A.R.P. TRAINING.**—A nine-lecture course in Air-Raid Precautions is being given to members of the Portsmouth Branch of the Pharmaceutical Society by Dr. L. M. Maybury. The

course started on February 20, when the attendance was over ninety. An examination is to be held at the conclusion of the course.

**LECTURE.**—At a meeting of the Portsmouth Branch of the Pharmaceutical Society held recently, when an address was given by Mr. W. E. James (Glaxo Laboratories, Ltd.) on "The Trend of Modern Medicine," Mr. H. A. Mecoy presided. Many questions were put to the speaker. The chairman proposed a vote of thanks to Mr. James; this was seconded by Mr. W. E. Brown.

### Miscellaneous

**DISPENSING FOR THE POLICE.**—A subcommittee of the Corporation watch committee has been authorised to make terms with the Preston Chemists' Association in regard to the dispensing of medicines and drugs to members of the local police force on a basis similar to that of insured persons under the National Insurance Acts.

**IN THE COURTS.**—At Stratford, London, Police Court on February 22, Mr. F. P. Armstrong, M.P.S., Barking, was summoned for selling wood vinegar deficient in acetic acid. Defendant was ordered to pay 10s. costs.—At Lytham Petty Sessions recently, Nazone, Ltd., manufacturing chemists, Blackpool, were fined 6s. for exhibiting an advertisement so as to disfigure rural scenery from the highway. An order was made for removal of the hoarding within twenty-one days.

## Welsh Notes

**NEW OFFICERS.**—The annual meeting of the Rhyl Branch of the Pharmaceutical Society was held at Rhyl on February 22, when the following officers were appointed:—*President*, Mr. C. R. Dixon, Abergele; *Vice-President*, Mr. W. E. Pritchard, Prestatyn; *Treasurer*, Mr. T. E. Hughes, Prestatyn; *Secretary*, Mr. H. Crabbe Davies, Rhyl; *Auditor*, Mr. R. Garner, Rhyl; *Committee*, Messrs. Garner and James; Miss Dixon; Messrs. Howells, Goronwy Jones, Anwyl, R. Lawrence and T. W. Jones. A discussion took place on the Society's building fund appeal, and it was left to the officers (with power to add to their number) to evolve a local scheme of appeal.

**RESOLUTIONS TO N.P.U. EXECUTIVE.**—At a meeting of the Anglesey, North Carnarvonshire and Colwyn Bay Branch of the National Pharmaceutical Union, held at Llandudno on February 22, the following resolutions were passed:—"That the N.P.U. Executive be asked to issue their own publication"; and "That the N.P.U. Executive be asked for a ruling on the question 'Can a pharmacist legally refuse the sale of any article which he has in stock?'" The meeting was addressed by Mr. Kemp (N.P.U. local organisation officer), who gave details of the work undertaken by the Union on behalf of chemists.

**BUILDING-FUND WELSH APPEAL FUND.**—A printed appeal for donations towards the Glyn-Jones memorial lecture theatre (as the Welsh contribution to the Pharmaceutical Society's new building), was sent out so as to reach all pharmacists in Wales and all Welsh pharmacists on St. David's day (March 1). Accompanying it was a copy of a letter to the chairman of the Welsh Appeal Fund (Mr. H. Humphreys Jones) from Dr. Alfred Cox (a former secretary of the British Medical Association) in which he states: "If it is in order I should be glad to be allowed to make a modest contribution. I am not a Welsh pharmacist, but none of you can have a warmer feeling of admiration for Glyn-Jones than I have. When he was secretary of the Pharmaceutical Society and I was secretary of the British Medical Association we often worked together in perfect amity and, I think, to the benefit of both our bodies."

## Irish Notes

### Miscellaneous

**BUSINESS TERMINATES.**—One of the best-known pharmacies in Belfast—Harmurs, Ltd., 29-31 Ann Street—has closed down. The fittings, equipment, photographic plant and stock-in-trade are being sold (auction on March 2 and 3). The company was founded early in the present century, and the last directors were Messrs. W. J. Hardy (Davidson & Hardy), Lewis Murray



(Davidson & Murray), Robert F. McCartney, J.P., Coleraine, and L. J. Woodside, Ballymena.

SIR THOMAS ROBINSON (president, Pharmaceutical Society of Ireland), who was indisposed for some time with a cold, is now well on the way to recovery and hopes to be able to resume his professional and business activities in a short time.

FINE FOR EVASION OF CUSTOMS.—At Clones District Court, co. Monaghan, on February 23, Cecil Chapman, chemist's assistant, McCurtain Street, Clones, was fined £100 for smuggling six tubes of Ryzamin B at the Medical Hall, Clones. Mr. F. Patterson (solicitor for the defendant) said the duty on the goods amounted to only three-eighths of a penny, and the fine imposed was most unreasonable. Mr. J. J. Keenan (State solicitor) said the amount mentioned as duty was not correct.

GOLF.—The annual meeting of the Irish Chemists' Golfing Society was held in Dublin on February 10, Mr. A. F. Roche, M.P.S.I. (captain) in the chair. Mr. Philip Fahey, M.P.S.I., was elected captain, with Mr. Roche as secretary, and Mr. R. Bates, M.P.S.I., as treasurer. Rosslare golf course was unanimously chosen as the venue for this year's three-day tournament, which will be held in May. It was directed that a cheque from the Society should be sent to the treasurer of the Benevolent Fund of the Pharmaceutical Society of Ireland.

## Scottish Notes

### North British Executive

A meeting of the Executive of the North British Branch of the Pharmaceutical Society was held at 36 York Place, Edinburgh, on February 24, Mr. W. Spence Culbert in the chair. There

were also present Messrs. Anderson, Arthur, Beattie, Bennett, Culbert, Hay, Henry, Innes, Jack, Mackenzie, Miller, Milne, Murray, Ritchie and Sinclair.

The chairman referred to the loss sustained by the death of Mr. P. M. Duff, Glasgow, and it was agreed to record in the minutes the Executive's regret at his passing.

The resident secretary stated that arrangements had been made for the Scottish campaign in which the president and Mr. Marns (chairman of the Appeal Fund Committee) would address meetings in Aberdeen, Dumfries, Dundee, Edinburgh, Glasgow, Inverness and Perth.

The resident secretary reported that in connexion with the National Register, a central committee had been appointed at headquarters and it was necessary to appoint a Scottish committee. In doing so they would have to consider various interested bodies and representatives from various parts of the country. The following were appointed: the chairman of the Executive of the North British Branch; Mr. W. F. Hay; Mr. David Harley; one representative, Pharmaceutical Standing Committee (Scotland); one representative, the Scottish Pharmaceutical Federation; one representative, bodies corporate; one representative, co-operative societies; one representative, Wholesale Drug Trade Association.

Mr. Hay said that the Aberdeen Pharmaceutical Association was holding a Centenary Banquet on March 15. The Executive would be represented by the chairman and the resident secretary.

The resident secretary reported that a letter had been received from Mr. Mackay, secretary, Royal Technical College, Glasgow, intimating that Mr. J. H. Ramsay had been duly appointed a member of the Committee of the School of Pharmacy, in place of the late Mr. Duff.

# Topical Reflections

By Xrayser

## Factors in Competition

Further light is thrown on the nature of present-day competition by the first editorial article in your last week's issue (p. 213), and by the report of the Northern Ireland Pharmaceutical Society's Council meeting on the two following pages. The problem of competing with fixed-price bazaars is now complicated by the threatened irruption of co-operative societies into this already well-tilled field, with results not easy to calculate. Your question whether the chemist really wants to compete with this kind of trade is susceptible of more than one answer, locality being in some cases an important consideration. I suggest that each chemist must decide on his own policy, and that if he has to meet a demand for cheap goods he can at least put on show higher types of merchandise side by side with "popular" articles. If the words quoted by the vice-president of the Pharmaceutical Society of Northern Ireland, "Don't go to your chemist for anything," were taken from an actual circular it should not be difficult for any chemist troubled with that kind of propaganda to reply briefly and effectively in some form of advertisement. To an alert trader, indeed, such an opening affords a first-rate opportunity. The "young men tearing round the country in cars" raise yet another problem. We cannot all tear round in cars—at any rate, during business hours; and so long as there are people foolish enough to buy goods at their own doors, so long, I suppose, there will be young people tearing round, in cars or otherwise, with the object of poaching on the preserves of shopkeepers. Here, also, a timely advertisement is not to be neglected by the trader who is hit.

## Exporters' Difficulties

When we turn to your remarks on the problem of export trade (p. 213), we realise the impact of other difficulties. On the relations between Empire trade and world trade I must write with reserve, this subject being manifestly too complex for adequate discussion within the limits of a paragraph. While reading your informative comment on export to and import from certain of the Dominions, I had the curiosity to go back to the Ottawa Agreement (*C. & D.*, 1932, II, 501). We may fairly infer, after nearly seven years' experience of its working, that

the Agreement has not entirely fulfilled expectations. If that is so, the search for bilateral agreements in other directions, actually envisaged at Ottawa, becomes the more necessary. In the chairman's speech at the annual meeting of one of our leading manufacturing houses the other day it was stated (I quote from memory) that in thirty-seven countries to which the company exported there were in all 165 restrictive schedules to be negotiated before transactions could be settled. Where such transactions involve the acceptance of what is known as "blocked" currency, the difficulties become very great. What is to be done? Shall our exporting industries decide on "war to the knife," or is some workable arrangement possible? I notice that the Earl of Derby, speaking at a British Industries Fair luncheon (p. 216), expressed the view that "a time of peace and prosperity was closer than many imagined."

## Pharmacy Clubs

The formation of a pharmacy club at Bradford (p. 202)—the fourth in Great Britain, if I have not overlooked any—may well mark a turn of the tide in the direction of greater individuality in the constitution of chemists' associations. If the list of these associations in the *C. & D. Diary* for 1922, prepared a year before the British Pharmaceutical Conference was taken over by the Pharmaceutical Society (an event which I, for one, still regret), is compared with that in your current *Diary*, it will be seen that whereas in 1922 it occupied seven and a half columns, it now fills only three and a half columns. The formation of these associations was in all cases spontaneous: they were established by men of common interests, under no pressure (with the solitary exception of that arising from the uncertainties of the first National Health Insurance Act) and without subsidy. They were conducted for the benefit of those who formed their membership, not by way of excluding contact with British pharmacy as a whole but primarily for the local handling of problems that are best examined in the light of local conditions. I have nothing to say against the sending of delegates to representative meetings of the two principal organisations in pharmacy in this country; but I regard the local association as the normal unit from which local branches of the other bodies should be derived. The freedom associated with the name "club" should conduce to an extension of the movement announced from Bradford.



## Social Events

**ST. VALENTINE'S DANCE AT NORWICH.**—Valentines and gifts for the ladies were surprises at the dance of the Norwich Branch of the Pharmaceutical Society held in the city on February 14 in support of the Society's Benevolent Fund. Norwich members and friends were joined by pharmacists from a wide area of Norfolk. As a result of this dance and other social events it is hoped to raise £50 for the Fund. Mr. J. Cook was M.C., and the arrangements were made by a committee consisting of Messrs. W. T. Pitchford and W. H. R. Rudd (chairman and secretary of the branch), Messrs. M. A. Leaman, A. B. Beeston, T. S. Patterson and J. C. Davis, with Mr. G. Baskerville as dance secretary.

**LEEDS JOINT BENEVOLENT FUND DANCE.**—Under the auspices of the Leeds pharmaceutical benevolent committee, representing all sections of pharmacy, the annual whist drive and supper-dance took place on February 22; 250 people were present. Mr. W. F. H. Kemp (chairman, Leeds Branches of the Pharmaceutical Society and National Pharmaceutical Union) and Mr. G. C. Crummack (secretary of the committee) were the organisers, supported by a body of helpers that included Messrs. T. Shooter, F. C. Stock, A. L. Peters, N. H. Burns and E. Buckley. Councillor Herbert Hodgson was M.C. for whist, and Messrs. T. Heseltine (a member of the N.P.U. Executive) and J. Roberts for the dancing. Various prizes, secured by a subcommittee comprising the Mesdames Armitage, Crummack and Hodgson, were presented by Mrs. Kemp. Proceeds were for the Pharmaceutical Society's Benevolent Fund, and during the evening a sum of £6 was raised by a raffle organised by Messrs. R. T. Donaldson and C. M. Good.

**NORTH STAFFORDSHIRE BRANCH.**—The annual dinner and dance of the North Staffordshire Branch of the Pharmaceutical Society, held at Stoke on February 23, was the largest and most successful yet held by the branch, guests totalling 350. A film of the arrival of the guests was taken by Mr. E. J. Martin, and this is to be displayed in colour at a future meeting of the branch. A film of the speeches and presentations was also taken. Competitions during dinner added interest to the function, and there were gifts of pottery for each lady guest. Mr. W. F. Redfern (chairman of the branch) presided. Dr. H. W. Webb, proposing the toast of the Pharmaceutical Society, said his own active association with the Society had extended over fourteen years, during which time he had been examiner in chemistry. Dr. Webb said manufacturers now had great regard for pharmaceutical qualifications. Mr. Thomas Guthrie (president, Pharmaceutical Society), responding, said the Society was having a hard task in keeping the machine going. As the years passed, any society, especially one with an increasing membership, found increasing difficulties, and the problems were more difficult to surmount. He could say with safety that any of those fortunate people who had thirty, forty or fifty years ahead of them would find the pace getting swifter in the years to come. The chairman gave the toast of "The Guests," and paid tribute to the work of Mr. Guthrie in forwarding the start of building the new headquarters in Brunswick Square at a cost of £350,000. The Lord Mayor and Dr. Healey responded, the latter speaking of his admiration for the research work of the Society. Dr. Wotherspoon (Medical Officer of Health, Stoke) said that if any of the members of the Society did not see eye to eye with his department, he hoped they would call and discuss the matter with him.

**MEDWAY DINNER AND DANCE.**—At the annual dinner and dance of the Medway Branch of the Pharmaceutical Society held at Maidstone on February 15 Mr. L. R. Nicholson (chairman) presided, and the toast of the "Pharmaceutical Society" was proposed by Mr. J. P. Wheeler. Mr. J. C. Young (a member of the Council, replying, said the county of Kent was as closely associated with the foundation of the Society as any in England. The first president (Mr. William Allen) was the confidant of the Duke of Kent, father of Queen Victoria, who granted the Charter. Mr. Joseph Bell (co-founder of the Society) was an intimate friend of Charles Dickens. He gave a brief history of the Society and spoke of the new headquarters, adding that it was hoped every member of the Society would be associated with the project to supply additional equipment. "The National Pharmaceutical Union" was proposed by Mr. J. E. French, who said that, though a member of the Executive he would not be transgressing in saying that the Union had

gone all out to do all it possibly could to benefit pharmacy, and had done it well. He gave examples. Replying, Mr. S. J. Stearn (chairman, N.P.U. Executive) said the Executive was working to build for pharmacy something better than it had ever had in the past. Colonel P. J. Gaffikin, M.C., M.D. (Medical Officer of Health for Maidstone), humorously gave "The Medway Branch," pointing out that it was like proposing "The Foundations of Music" to the B.B.C., for one member of the Branch was a member of the Kent County Council, another was on the Maidstone Council, and there were whispers that a third was likely to be elected. In his reply the chairman said they had had a successful year, largely due to the secretary (Mr. E. J. Reedman). Last year it was said that their motto should be "Headway in the Medway." They had made considerable headway and were still going ahead. During the past year the committee had been loyal, attending meetings regularly, though many of them did not live in the towns in which the meetings were held. The propaganda scheme the Branch had adopted was an attempt to convince the public that the chemist was the man to obtain medicines and drugs from. Mr. E. J. Reedman proposed the visitors, and Councillor B. J. Watson replied. A whist drive and dance followed. Mrs. J. C. Young presented the prizes, and £9 7s. 6d. was collected for the Society's Benevolent Fund. Thanks were expressed to J. & E. Atkinson, Ltd., Mr. L. C. Beveridge, Mr. H. B. Dorling, Ensign, Ltd., Yardleys, Ltd., R. J. Reuter Co., Ltd., Erasmic Co., Ltd., Proprietary Perfumes, Ltd., Coty (England), Ltd., Kodak, Ltd., Smith & Co., and Mr. L. G. Young for the many prizes.

### Staff Festivities

**BOOTS' BLACKPOOL BRANCH.**—Over 250 people attended the staff party of Boots, Ltd., Blackpool, held recently. Amongst the guests were Mr. H. H. Riley (territorial general manager) and Mrs. Riley; Mr. J. A. W. Hepburn (territorial general manager for Manchester district) and Miss D. M. Hepburn; Mr. H. P. Ritchie (Nottingham). Mr. H. E. Barker (manager, Market Street branch) was present with Miss Jessie Barker. Mr. R. E. Turton and Miss E. Smith officiated as M.C.s for the whist, and Messrs. Eggleston, Mullineaux and Harrison for dancing. Mrs. Riley presented a number of prizes given by the firm.

**C. J. HEWLETT & SON, LTD.**—The staff of C. J. Hewlett & Son, Ltd., London, E.C., held their thirty-seventh annual dinner and dance at the Abercorn Rooms, Bishopsgate, on February 25. About a hundred members of the staff and friends sat down to dinner, with Mr. E. J. Millard, F.C.S. (managing director) in the chair, and Mr. Vivian C. Hewlett, F.C.S. (chairman of directors) as vice-chairman. After the loyal toast, that of "The Firm" was proposed by Mr. O. C. Pritchard (a representative), who paid tribute to the energy and enterprise of the directors. Mr. Millard, in his reply, referred to progress made during the year, despite difficult times. A feature of the evening was the presentation to Mr. A. J. Upton (foreman, tincture laboratory) of a wireless set from the directors, a gold watch from the staff, and a silver cigarette case from Mr. E. J. Millard, on completion of fifty years' service with the firm. The presentation was made by Mr. Vivian C. Hewlett on behalf of the directors, and Mr. Fesemeyer for the staff. A short concert was followed by dancing.

**POND'S EXTRACT CO., LTD.**—A human "organ" was an unusual entertainment feature at the annual staff dinner and dance of Pond's Extract Co., Ltd., Greenford, at Ealing on February 25. Guests (men and women) stood close together in organ-pipe formation, wearing white gloves held out to represent the double rows of a two-manual instrument, while others with reeds and flutes under their arms performed the function of the various stops to be pulled out or pushed in. On a bench before the "instrument" sat the organist (Mr. Cecil Millington) in scarlet robes, and as he manipulated the stops and keys the sounds of "John Peel" issued from the "organ." The novel idea was conceived by Mr. Douglas Roberts (assistant sales manager). At the dinner which preceded the dance Mr. A. Gunning (managing director) welcomed all present. Mr. W. F. King (sales manager and M.C.) replied on behalf of the staff. Boxes of chocolates were presented to Mrs. Gunning and Mrs. Wenham, and Mrs. Gunning was also the recipient of a bouquet of spring flowers from the staff. Mr. Vance King played organ selections during the evening.



# Tuberculosis After Inoculation

IN the High Court, Dublin, on February 22, the action brought by Michael O'Kennelly against the Wellcome Foundation, Ltd., was resumed (*C. & D.*, February 25, p. 206). Dr. Robert Collis, Dublin, specialist in children's diseases, said if tuberculin were injected into the thirty-eight children at Ring College, as had been suggested, he would expect about one-third of the children to show reactions within twenty-four hours. "These children, in my opinion," said Dr. Collis, "were not given a massive dose of two thousand million live tubercle bacilli but a very small dose of merely 100 or 1,000. The evidence in the case suggests to me that there were a very small number of contaminating organisms present." At another stage in his evidence, Dr. Collis said: "I suggest there was a small infection of these children at Ring with not very virulent organisms. This infection may have been caused by a breakdown in sterilisation. Every doctor will agree that at times he has had a wound treated with every sterile precaution go wrong, or that one of his injections went wrong. We all have these unfortunate experiences. Tubercle bacilli may have got in through accidentally striking the focus in the arm of a child, or the syringe may have been contaminated in some unusual way. This theory fits in entirely with the evidence." Dr. C. J. McSweeney, medical superintendent, Cork Street Fever Hospital, Dublin, said he would not approve of the re-use of soiled dressings. In his view the technique employed by Dr. McCarthy when inoculating the Ring children was beyond reproach. Dr. Richard A. O'Brien, director of the Wellcome Foundation, said he had visited most of the leading manufacturing laboratories in the world, and in his opinion the Wellcome Laboratories compared well with those he had seen. Under the terms of Sir Henry Wellcome's trust any profits made out of the foundation went back into scientific research. No profits went into private pockets.

Mr. J. M. Fitzgerald, K.C., for the defendants, applied for a direction on the grounds that there was no evidence

given to establish negligence on behalf of his clients. The Judge said he had serious difficulties with regard to the issue of negligence, but the case having gone so far he thought it better to let it go to the jury and have their view upon it. Mr. Fitzgerald asked that the following questions be put to the jury: (1) Did the defendants negligently issue a bottle containing live tubercle bacilli instead of a bottle of T.A.F.; (2) was such a bottle used by Dr. McCarthy; (3) if so, did it cause the death of Susan O'Kennelly and injury to the three minor plaintiffs; (4) damages, if any. Mr. E. J. Kelly, K.C., for the plaintiffs, objected to the issue being narrowed down in this way, but the Judge said he would put the questions in the form suggested. This concluded the hearing on February 22.

The case was resumed on February 23. Mr. Brereton Barry, K.C., closing the case for the plaintiff, said a serious charge was made against a firm of great reputation. They were charged with issuing from their laboratory a suspension of living tubercle bacilli instead of what was supposed to be, and was labelled as, diphtheria prophylactic. That charge had not been made lightly or recklessly. It had only been made by the plaintiff after careful investigation of every aspect of the case. Summing up, Mr. Justice Maguire said if the evidence left the jury in doubt between two possibilities, one that the infection came from the bottle as it came from Beckenham, or the other that it came from the bottle being infected in some way while in Dr. McCarthy's hands, and they could not make up their minds between those alternatives, then the plaintiff's case failed. After an absence of twenty-five minutes the jury answered "No" to the question "Did the defendants, the Wellcome Foundation, Ltd., negligently issue a bottle containing live tubercle bacilli in suspension for use instead of a bottle of T.A.F. (toxoid antitoxin floccules)?" Mr. Justice Maguire accordingly gave judgment in favour of the Wellcome Foundation with costs (see also p. 244).

## Iodine Locket Case

A SETTLEMENT was announced in the King's Bench Division of the High Court, London, on February 20, of a libel action by Dr. J. A. Goodfellow, Chesterfield, against the Society of Chemical Industry and Harrison & Sons, Ltd., publishers and printers, respectively, of "Chemistry and Industry." Mr. H. C. Leon, for the plaintiff, said that his client was a registered medical practitioner who was chairman of the Chesterfield Chamber of Commerce, and president of the Chesterfield Ratepayers' and Property Owners' Association. In 1911 he retired from active practice, and in 1922 he started research into the question of goitre, with which Chesterfield and district was very much affected. With another doctor he started a campaign to induce people to use iodine in various forms to cure goitre. In 1932 he invented an iodine locket and "mushroom" diffuser of iodine. He perfected these inventions purely for the benefit of humanity and from first to last had never made a single penny out of these inventions.

Unfortunately a number of unscrupulous imitators arose and started to put on the market a number of lockets and iodised articles for which they made ridiculous claims. On April 9, 1938, an article was published in "Chemistry and Industry" in which reference was made to a number of frauds that had been perpetrated on the public. No doubt the intention was to refer to the people who made unscrupulous claims, but the defendants accepted that it might appear that reference was made to Dr. Goodfellow, although he was not mentioned by name. Counsel said that the plaintiff accepted that they never intended for a moment to refer to him and the action had become capable of settlement because immediately the matter was called to their attention they said at once that they accepted without question the good faith of Dr. Goodfellow. They had agreed to pay a substantial sum of damages, and costs. Not a penny of the damages, however, would be used by Dr. Goodfellow for his personal benefit.

## Coming Events

### Monday, March 6

*Crosby Pharmacists' Association*, 3 Little Crosby Road, at 9 p.m. Social meeting. Travel talk and film by Rev. J. M. Richardson, M.A.

### Tuesday, March 7

*Birmingham Pharmaceutical Association (Scientific Section)*, Imperial Hotel, Temple Street, at 8.45 p.m. Film show.

*Guild of Public Pharmacists*, 17 Bloomsbury Square, London, W.C.1, at 7.30 p.m. Members' night.

*Manchester Branch, Guild of Public Pharmacists*, Victoria Hotel, at 7.30 p.m. Dr. C. E. Sykes on "Anaesthetics."

*University of London, Wellcome Research Institution*, 183 Euston Road, N.W.1, at 5.30 p.m. Professor W. Schulemann on "Chemotherapy." Also given on March 8 and 9, at 5.30 p.m.

*Wimbledon Pharmacists' Association*, Town Hall, Wimbledon, at 8.30 p.m. Address by Mr. G. A. Frith.

### Wednesday, March 8

*Bedfordshire Branch, Pharmaceutical Society*, Dujon, High Street, Bedford, at 7.30 p.m. Annual dinner and dance.

*Cambridge Branch, Pharmaceutical Society*, Lion Hotel, at 8 p.m. Film show.

*Manchester Pharmaceutical Association (Junior Branch)*, Hill's Restaurant, Market Street, at 8 p.m. Benevolent Fund supper dance.

*Wolverhampton Chemists' Association*, Civic Hall, at 8 p.m. Birmingham Conference Fund dance.

### Thursday, March 9

*Chester Branch, Pharmaceutical Society*, Royal Oak Hotel, Foregate Street, at 8 p.m. Supper; address by Mr. J. F. McNeall.

*London Chemists' Golfing Society*, Trocadero Restaurant, Piccadilly, W.1, at 7 p.m. Annual dinner and dance.

*Manchester Branch, P.D.A.*, Houldsworth Hall, at 8.30 p.m. Mr. G. B. Keary on "Amateur Photography."

*Notional Association of Women Pharmacists*, 17 Bloomsbury Square, London, W.C.1, at 8 p.m. Members' night.

*Northampton Branch, Pharmaceutical Society*, Geisha Café, Mereers Row, at 3 p.m. Annual meeting. Mr. G. R. Knox Mawer on "Topical Pharmaceutical Matter."

*Reading Branch, Pharmaceutical Society*, Great Western Hotel, at 8 p.m. Film show.



## Company News

**P.C. means Private Company and R.O. Registered Office**

ERNEST KELLNER, LTD. (P.C.).—Capital £100. Objects: To carry on the business of manufacturers of and dealers in vegetable and animal produce, chemicals, etc. Walter G. Hider, 76 Dundee Road, S.E.25, director. R.O.: 73 Basinghall Street, E.C.

SCOTTISH FERTILISERS, LTD.—Registered in Edinburgh.—Capital £100. Objects: To carry on the business of manufacturers and distributors of and dealers in all kinds of manures, lime, fertilisers, etc. The first directors are not named. No R.O. given.

NUTROVA FOODS, LTD. (P.C.).—Capital £100. Objects: To carry on the business of manufacturers of and dealers in beverages and medicines; chemists, druggists, etc. Henry Walsh, 30 Wellington Street (St. Johns), Blackburn, director. R.O.: Apex Mills, Randal Street, Blackburn.

E. SKUSE, LTD. (P.C.).—Capital £1,000. Objects: To carry on the business of manufacturers of herbal tablets and medical, herbal and other mixtures for coughs, colds and other ailments, etc. The first directors are not named. Solicitors: Sturton & Sturton, 74 Great Tower Street, E.C.

OVERSEAS RAW & MANUFACTURED PRODUCTS, LTD. (P.C.).—Capital £3,000. Objects: To carry on the business of general merchants and manufacturers of food and other products, chemicals, etc. The first directors are to be appointed. Solicitors: Russell & Arnholz, 5-6 Great Winchester Street, E.C.

CAPT. W. A. COLLINGS, LTD. (P.C.).—Capital £250. Objects: To carry on the business of manufacturers of and dealers in anatomical, orthopaedic and surgical appliances of all kinds, artificial eye and limb makers, etc. The first directors are to be appointed. Solicitors: McKenna & Co., 31-4 Basinghall Street, E.C.2.

ALLOYS & MINERALS, LTD. (P.C.).—Capital £300. Objects: To carry on the business of dealers in and exporters or importers of any metal or alloy, mineral, ore, organic or inorganic substances, etc. Philip W. Smith, 9 Bycullah Road, Enfield, director. Solicitors: Wild Collins & Crosse, Kennan's House, Crown Court, Cheapside, E.C.

A. A. WILLIAMSON (1939), LTD. (P.C.).—Capital £3,000. Objects: To acquire the business of a chemist and druggist recently purchased by H. A. Roberts from the liquidator of A. A. Williamson, Ltd. (in voluntary liquidation) and carried on at Market Place, Ilkeston, Derby. Henry A. Roberts, 13 Magdala Road, Nottingham, director.

ANALYSIS, LTD. (P.C.).—Capital £100,000. Objects: To acquire from Roche Products, Ltd., or any subsidiary company thereof, or any company formed by way of reconstruction thereof, or incorporating its business by amalgamation or association, or (with the consent of such company) from any person, firm or company acting as agent, factor, consignee or nominee of such company, any goods, commodities and substances manufactured, prepared or dealt in by Roche Products, Ltd., or such other company, and to prepare for sale and sell (within the United Kingdom), to its shareholders and such others as may wish to be supplied (but not to expend money or incur liabilities in promoting such sales) any goods, commodities or substances so purchased. The first directors are to be appointed.

McCLURE, YOUNG & Co., LTD.—The directors have declared a dividend of 25 per cent. for the year ended December 31, 1938. The following appropriations were made: Contingency reserve, £1,000; advertising, £1,000. The report and accounts were unanimously adopted.

KRASKA Co., LTD.—Notice has been given in "The London Gazette" that the creditors of the above-named company are required to send in their names and addresses on or before March 14, 1939, to the liquidator, Mr. L. A. Reddall, 1 Guildhall Chambers, Basinghall Street, London, E.C.2.

COMPANIES DISSOLVED.—Notice has been given in "The London Gazette" that the name of the following company has been struck off the register and the company dissolved: Belmont Pharmacy, Ltd.

## Stock Exchange Prices

£1 shares unless otherwise stated	Dec. 30, 1938	Jan. 31, 1939	Feb. 28, 1939
	s. d.	s. d.	s. d.
Allen & Hanburys, 7% Prefd. Ord. ...	26 3	26 3	27 6
Amalg. Dental Co., 8% Prefd. Ord. ...	25 6	25 0	25 6
" " Deferred £1 ...	11 3	8 9	10 3
Aspro, Ltd., 5s. shares ...	11 6	10 6	12 9
Ayrton, Saunders & Co., 7½% Pref. ...	22 9	22 3	22 3
Beechams Pills, Deferred 2s. 6d. shares ...	7 6	6 6	6 9
Benger's Food, Ord. ...	19 6	19 0	19 0
Benzol & By-Products cum. part. Pref. ...	18 0	16 3	17 9
Berger (Lewis) & Sons, Ord. ...	48 0	43 9	45 0
Blundell Spence & Co. ...	12 3	12 6	12 0
Boake (A.), Roberts & Co., 5% Pref. ...	20 6	20 6	20 6
Boots Pure Drug, Ord. 5s. shares ...	39 3	39 9	40 6
Boots Pure Drug, 7% "A" Prefd. Ord. ...	32 6	31 9	31 3
Boots Cash Chemists (S.), 6% "A" Prefd. ...	28 6	28 6	28 0
Borax Consold., Dfd. Ord. ...	27 0	25 7½	22 0
Bovril, Ord. ...	27 1½	26 6	25 9
" " Dfd. ...	20 4½	19 6	17 6
British Industrial Plastics (formerly British Cyanides), Ord. 2s. shares ...	2 0	2 1	2 1½
British Drug Houses, The, Ord. ...	21 9	21 9	22 0
British Glues & Chemicals, 4s. Ord. ...	4 4½	4 0	4 3
British Oil and Cake Mills, Prefd. Ord. ...	41 0	41 6	41 6
British Oxygen, Ord. ...	71 0	68 0	75 0
British Photo. Indus., 6% Cum. Pref. ...	3 3	3 0½	3 0½
Burt, Boulton & Haywood, Ord. ...	18 6	17 3	17 9
Bush (W. J.) & Co., 5% Pref. £5 ...	100 0	100 0	99 7½
Callard, Stewart & Watt, Ord. ...	3 7½	3 1½	3 7½
Cooper, McDougall & Robertson, Ord. ...	27 0	26 0	24 3
Crosfield (Joseph) & Sons, 6½% Pref. ...	27 0	26 6	27 0
Dubarry Perfumery Ord. 1s. ...	2 4½	2 4½	2 3
" " 7½% Pref. ...	21 6	21 6	21 0
Evans Sons Lescher & Webb, Ord. 6s. 8d. shares ...	3 9	3 9	4 0
" " " 6% cum. part. Pref. ...	6 3	6 3	6 3
Field (J. C. & J.), Ord. ...	23 9	23 6	23 3
Galloway (P. H.), Ord. 2s. ...	2 10½	2 10½	2 10½
" " 7½% Cum. Pref. ...	26 0	24 3	23 9
Genatosan, Ltd., 1s. ...	5 0	5 0	5 0
Gossage (William), 6½% Pref. ...	26 9	26 6	27 1½
Greeff-Chemical H'dings, Cum. Pref. 10s. ...	9 9	10 0	9 9
" " Ord. 5s. ...	5 3	5 0	4 6
Griffiths Hughes (Kruschen), Ord. ...	8 3	8 10½	8 6
Grout & Co., Ord. ...	9 3	8 6	8 6
Hodders, Ord. 1s. ...	0 7½	0 7½	0 6
Ilford, Ltd., Ord. ...	26 9	24 9	25 6
" " 6% Pref. ...	25 0	23 9	24 3
Imperial Chemical, 7% Pref. ...	31 0	29 4½	30 0
" " Ord. ...	30 9	30 6	32 0
Intern. Sponge Importers, 6% Pref. ...	3 6	4 10½	4 6
Knight (John), 25% Prefd. Ord. ...	90 0	81 3	81 3
Laporte (B.) & Co., Ltd., Ord. ...	83 9	78 9	80 0
Lever Bros., Ltd., 7% Pref. ...	28 6	28 0	28 0
" " 8% Pref. ...	30 6	28 0	29 6
" " 20% Prefd. Ord. 5s. ...	18 3	17 4½	17 9
Lewis & Burrows, Ord. ...	21 3	22 6	21 3
" " 6% Pref. ...	20 0	19 7½	20 0
Liebig's Ext. of Meat, Ord. £5 ...	£14 8	£14	£11 ½
Macleans 6% Red. Pref. ...	21 6	21 9	22 0
Mellin's Food, 6% Pref. ...	1 3	1 0	1 3
Nathan, J. (Glaxo), 7% Pref. ...	21 6	21 0	22 0
" " 8% Prefd. 10s. ...	11 4½	11 0	11 3
" " " Ord. 1s. ...	6 0	5 6	5 3
Pears (A. & F.), 5% Deb. £100 ...	£107	£108	£108
Reckitt & Sons, Ord. ...	102 6	101 3	101 0
Sangers, Ord. 5s. ...	21 6	20 9	21 3
"Sanitas," The, Co., 9% Pref. ...	25 6	25 9	24 6
Sanitas Trust, 10% partic. Pref. ...	26 9	26 3	25 1½
Smith (Stephen) & Co., Ord. 5s. ...	8 7½	7 6	8 4½
Spratt's Patent, Ord. ...	46 6	46 0	48 0
Stevenson & Howell, 6½% Cum. Pref. ...	23 9	23 3	23 6
United Glass Bottle Man., Ord. ...	48 9	47 3	47 9
Veno Drug Co., 8% Pref. ...	24 0	24 6	24 4½
Virol, Ltd., Ord. ...	29 3	29 0	29 0
" " 7% Pref. ...	24 6	24 3	24 0
White (A. J.), Ltd., Ord. 10s. ...	16 9	15 9	16 6
White (Timothy) & Taylors, 7½% Pref. ...	28 7½	27 0	27 3
" " Ord. 5s. ...	22 6	24 3	24 9
Woodlands, Chemists, Ord. 2s. ...	0 9	0 7½	0 6½
Wright, Layman & Umney (1932), 7% cum. Pref. ...	22 9	22 6	23 0



# Pharmaceutical Society of Great Britain

## Council Meeting

AMONG the business transacted by the Council of the Pharmaceutical Society at its meeting on Tuesday, February 28, were the following items:—

*Proposed amendment of the Pharmacy and Poisons Act.*—The Council received the minutes of a conference of Pharmaceutical organisations held on February 22, and adopted a recommendation that a memorandum be prepared and sent to the Home Secretary recapitulating the views of the Pharmaceutical Society on the question of Sections 8, 9 and 10 of the Pharmacy and Poisons Act, 1933. It was understood that there would be a further meeting of the conference to prepare a draft memorandum for submission to the Council at its meeting in April.

*The Code of Ethics.*—The Council also considered the views of the conference of pharmaceutical organisations upon the code of ethics prepared by the Tees-side Branch and the rulings on matters of professional conduct prepared by the Organisation Committee after consideration of the code of ethics. It was decided that before the views of the conference on these documents were considered by the Council they should first be discussed by the Organisation Committee to which they were accordingly remitted.

*The Central Pharmaceutical Emergency Committee.*—The minutes of the meeting of this Committee held on February 13 were presented by the President. There were present:—Mr. T. Guthrie (President, in the chair), Mr. W. Deacon, Mrs. J. K. Irvine, Mr. G. R. Knox Mawer, Mr. H. W. Wallis, Mr. A. Sugden (Company Chemists' Association), Mr. W. Spence Culbert, Mr. G. A. Mallinson, Mr. S. J. Stearn, Mr. A. Mortimer, Mr. F. B. Royal (Guild of Public Pharmacists), Sir Fred Hayward (Co-operative Union), Major G. T. Garroway (War Office), Wing-Commander E. C. Foreman (Air Ministry), Mr. J. M. Johnston (Scottish Department of Health), Mr. Hogarth (Scottish Department of Health), Mr. A. W. Thompson (Ministry of Health), Mr. W. H. Boucher (Ministry of Health). The report contained the following paragraphs:—

The Committee noted their constitution and terms of reference as set out in the Minutes of the Emergency Committee of January 30, 1939. Mr. Boucher explained that the Committee was essentially an advisory committee, the executive power remaining with the Minister of Health. He also stated that he was in a position to give an undertaking that all requirements for the full-time services of pharmacists, either in the defence forces or for national service as civilians, from the Departments would be addressed to the Committee.

It was resolved "That the Ministry of Health be invited to extend the scope of the Committee's work so as to include dispensers."

Mr. Boucher stated that it was the view of the Ministry of Health that the Register could best be kept in triplicate (the Scottish Register in quadruplicate) in order that one set could be kept in London, one sent in the event of an emergency to a safer part of the country, and the third set distributed to whatever local bodies might be selected by the Committee for the purpose. The Committee agreed that the Register should be kept in this form.

The form of questionnaire to be sent to pharmacists and the covering letter to accompany it were approved, subject to verbal amendments.

Mr. Boucher conveyed the thanks of the Ministry and the personal thanks of the Minister of Health to the Committee for undertaking the compilation and maintenance of the Register.

The report was received.

It was resolved to add to the Committee one additional representative of the Company Chemists' Association, and the chairman for the time being of the Public Services' Committee. In reply to a question the secretary stated that over 15,000 forms had been returned.

*Correspondence.*—From the Shropshire and Montgomeryshire Branch forwarding the following resolution: "The members view with the utmost concern the attitude of the co-operative societies in relation to Sections 8, 9, 10 of the Pharmacy and Poisons Act, 1933. In their opinion the Act

must be enforced to its fullest extent, and a firm stand must be made and adhered to by the Society's Council." The letter was received.

From the resident secretary in Scotland conveying the recommendation of the North British Executive for the constitution of the Scottish Pharmaceutical Emergency Committee. It was resolved that the Scottish Committee be constituted as follows: The chairman of the Executive of the North British Branch, Mr. W. F. Hay, Mr. David Harley, One representative (Pharmaceutical Standing Committee (Scotland)), One representative (The Scottish Pharmaceutical Federation), One representative (bodies corporate), One representative (co-operative societies), One representative (Wholesale Drug Trade Association).

## Wednesday's Proceedings

Responsibility for watching over the erection of the new headquarters in Brunswick Square and the nationality of foreign pharmacists recently granted concessions in this country were among the subjects discussed at the meeting of the Council, held at Bloomsbury Square, London, W.C., on March 1, the president (Mr. Thomas Guthrie) in the chair. Apologies for absence were received from Professor Dilling and Mr. Parry. The Council decided to send a letter to Mr. Parry expressing the hope that he would soon be restored to health and be able to take up his work on the Council.

## DEATHS

THE PRESIDENT then made sympathetic reference to the deaths of M. Eugene Leger of Paris, Hanbury medallist in 1911 and honorary member of the Society; Mr. David Lloyd Howard, vice-chairman of Howard & Sons of Ilford; Professor Arthur Smithells; and Mr. William Burrows Trick.

## RESPONSIBILITY FOR NEW BUILDING

The question of the responsibility in connexion with the new building came up on a report of the Establishment Committee, in which it was stated that the chairman, Mr. Melhuish, had read a report on the building. The Committee recommended that the president, the chairman of the committee and the secretary be asked to submit to the next meeting a full memorandum on the subject and the procedure to be adopted in reporting to the committee in future. A member described the recommendations as vague and asked whether a clerk of works had been appointed, and what was the point of contact between the committee and the erection of the new building. Mr. Melhuish said he called for a report some months ago, but an indisposition caused him to leave the matter at that time. He had presented a report at the meeting of the committee on the previous evening, however, and arising out of that report something further would be done. The committee thought with Mr. Wallis that the position regarding the responsibility of the committee should be made clear. He felt that the committee should either bear the responsibility if it was put on them or that they should be absolved from such responsibility altogether.

The Council then went into committee to discuss the matter.

## CONCESSIONS TO FOREIGN PHARMACISTS

With regard to the nationality of the foreign pharmacists recently granted concessions by the Society, the question was introduced by the report of the Education Committee, which stated that five applications for concessions in respect of the examination regulations had been considered and four granted.

MR. HOWELLS asked the nationality of the pharmacists referred to, and MR. ROWSELL replied that they were either people from Germany or Czecho-Slovakia.

MR. HIRST asked if they were already in this country, because he understood they were not.

MR. ROWSELL said they were in this country, and had been interviewed, and he assured the Council that everything was in order.

MR. MCNEAL pointed out that no exemption had been given to any of these people that was withheld from the Society's



own members, and they were not being given any special privileges.

Mr. ROWSELL said that was so.

Mr. PECK said they were getting special concessions, but Mr. ROWSELL emphasised that the concessions were no more than were available to the Society's members.

Mr. ROWSELL, replying further to Mr. HOWELLS, said the persons referred to were additional to the twenty-three already accepted.

#### DATE OF ANNUAL MEETING

The annual meeting was fixed to take place on May 17. The drafting of the annual report was referred to the Establishment Committee.

#### NATIONAL DEFENCE REGISTER

THE SECRETARY submitted a report on the progress of the National Register of Pharmacists. By first post on March 1, he stated, some 15,000 members of the Society had completed and returned the forms. This is an excellent and encouraging response. Acknowledgments will be sent as soon as possible, but first consideration is being given to entering the information supplied on to the cards of the Register. If, therefore, there is delay in some cases in the receipt of an acknowledgment, the reason will, it is hoped, be appreciated. It has been necessary to return some hundreds of forms to members because they were unsigned. The signature is an authority to the Society to disclose the information, if necessary, to a central or local authority and members are asked particularly to see that the form is signed before it is returned.

#### EDUCATION COMMITTEE

The report of the meeting on February 28 was presented by the chairman (Mr. P. F. Rowsell). The Committee recommended the Council to adopt revised regulations for the Herbarium Competition. The conditions in the dispensary of one manufacturing laboratory and two hospitals were approved for training apprentices, and arrangements were made for visiting a school which had made application for the approval of a course of instruction for the Preliminary Scientific examination. A subcommittee was set up to consider details of the educational estimates. The Committee considered the annual report of the Board of Examiners for Scotland, and directed that copies be sent to the approved schools.

Mr. ROWSELL explained the alterations which had been made in the regulations governing the Herbarium Competition. They included the abolition of the age limit of twenty-one and it was no longer necessary for candidates to be student-associates. The number of specimens had been reduced to between 100 and 150 as a maximum. It was recommended that candidates should include in their specimens any medicinal plants that grew in their districts. Such specimens would be taken into consideration in the award of the medal. He expressed appreciation of the help given to the committee by Mr. Hirst and Mr. Wallis, the latter of whom conducts the examinations on the subject.

#### REGISTRATION ITEMS

Twelve persons were elected student-associates of the Society and two persons were restored to the Register of student-associates. Eleven persons were restored to the Registers of Pharmaceutical Chemists and Chemists and Druggists. Two premises were restored to the register of premises.

John Joseph Ward, Dungannon, Tyrone, now residing at 154 Tachbrook Street, London, S.W., having complied with the regulations was registered as a chemist and druggist in accordance with the provisions of Section 4, sub-section (b) of the Poisons and Pharmacy Act, 1908, and Section 1 of the Pharmacy Act, 1929.

#### BENEVOLENT FUND COMMITTEE

The report of this committee showed that eighteen applications had been received and grants made or recommended ranged from £5 to £285, the last named being from the Hills Orphan Fund. Special contributions acknowledged included £200 from the estate of Viscount Leverhulme (third instalment), £20 from the Wembley Branch (smoking concert), £16 from the Worcestershire and Herefordshire Branch (supper dance) and £13 2s. from the Reigate, Redhill and District Pharmacists' Association.

The committee reported having considered two applications during the month and made grants of £26 and £19 10s.

#### ESTABLISHMENT COMMITTEE

The recommendations of a meeting (February 27) of the special subcommittee of the Committee on Precautions to be taken in Preparation for a National Emergency were reported by the chairman of the subcommittee, and it was recommended that no special arrangements be made in the present building to provide protection for the building or staff, and that the Publications Committee be invited to treat as a matter of urgency the question of the arrangements for printing the "Journal" in time of national emergency. The Committee had considered the estimates for the current year for the college (school and pharmacology laboratories), museum, library and headquarters, with a view to effecting economies upon these estimates. The Committee were unable to anticipate any material alteration in the estimates in the absence of some alteration in the policy of the Council, but wished to assure the treasurer that the greatest vigilance would be exercised over expenditure. The secretary reported that the funds which provided the Pereira Medal and award of books had been decreasing for some years and asked the committee to consider the position. The committee now recommended "that in and after the year 1940 the award to the Pereira medallist be modified by reducing from £5 to £2 10s. the amount spent on books other than those in memory of Edward Frank Harrison." It was reported that Dr. H. L. Eason, Principal of the University of London, had promised to deliver the inaugural sessional address for the session 1939-40.

Mr. MELHUSH said they were making arrangements for the safety of the staff and also for the preservation of their records in the event of a national emergency. These might involve going into the country and carrying on in London with a skeleton staff. With regard to his committee's estimates, it was hoped at any rate that they would not be exceeded.

Mr. NEATHERCOAT (treasurer) said he could not dissemble his disappointment at the fact that the committee had not been able to reduce its demands, for he had hoped that by some small curtailment of expenditure or alteration of policy savings might have been effected.

Mr. MELHUSH said the committee had done something in that direction, but he was not in a position that day to say exactly what it was.

#### FINANCE COMMITTEE

The financial statement showed that receipts since the last meeting, including a balance of £70 6s. 3d., amounted to £38,782 14s. 5d., comprising the following items:—Members' fees, £14,349 6s.; premises fees, £6,460 13s.; subscriptions, £101 2s. 6d.; examinations, £46 4s.; registration fees—as apprentice or student, £136 10s.; restoration fees and certificates of qualification, £8 2s. 6d.; law—penalties and expenses, £68 4s.; correction to register service, £29 18s. 6d.; rentals, £127 10s. 4d.; Pharmaceutical Journal, £1,826 2s. 3d.; Pharmaceutical Press, £1,551 4s. 7d.; F.S.S.U. contributions (including Pharmaceutical Trust), £397 4s. 7d.; sundries, £6 9s. 6d.; sale of Bloomsbury leases, less expenses and apportionments, £13,603 16s. 5d.

Payments ordered at the last meeting amounted to £7,109 2s., and £31,650 had been transferred to deposit account, leaving a balance of £23 12s. 5d. The amount on deposit account was £57,450. The balances on the other accounts were: Benevolent Fund (current account), £11 5s. 5d.; deposit account, £2,150. Benevolent Fund (donation account), £2 11s. 4d.; deposit account, £400. War Auxiliary Benevolent Fund, £6 16s. 10d.; deposit account, £400. Hills Orphan Fund, £24 17s. 2d.; deposit account, £350. Orphan Fund, £5 17s. 10d.; deposit account, £280. The action of the secretary in making payments amounting to £1,666 14s. 8d. was approved, as was also his payment of £251 5s. 3½d. for reimbursement by the Pharmaceutical Trust. Accounts for £17,227 4s. 1d. were passed for payment, and the trustees of the Pharmaceutical Trust were requested to pay accounts amounting to £2,467 3s. 9d.

#### LAW COMMITTEE

The report of the meeting held on February 28 was presented by the chairman (Mr. J. Jack). It showed that in England, Scotland and Wales 1,307 chemists' shops, 128 listed sellers and 42 drug store proprietors, grocers and similar traders had been visited by the Society's inspectors during the past month. It also showed that in England and Wales 137 drug stores and other premises had been visited.



# Papers by Manchester Pharmacists

A JOINT meeting of the Manchester Association and Branch of the Pharmaceutical Society was held on February 9, Mr. G. V. Tyler in the chair, when three papers were read by members.

Mr. J. R. Walmsley, F.I.C., M.P.S., gave a paper on the "Food and Drugs Act, 1938." This legislation, which was to come into force on October 1 of this year, was, he said, the largest piece of legislation for the regulation of foodstuffs and medicines that had ever been enacted. It had 102 sections, occupying ninety pages, against the thirty-eight sections in ninety pages of the 1928 consolidating Act which it superseded. No fewer than forty-one previous enactments were wholly or partially repealed, the earliest being one of the reign of Henry VIII. Most of the Act dealt with the manufacture, storage and sale of foodstuffs. The first six sections dealing particularly with drugs were of interest to the pharmacist. Mr. Walmsley dealt with the historical aspects of food and drugs legislation, and went on to define the term "drug" as including any internal or external medicine and "food" as meaning anything used as food or drink by man; an article was, he said, deemed to be for human consumption until proved otherwise. Of the six sections dealing specifically with drugs, section one prohibits the addition of any foreign ingredient to a drug that reduced its potency (any doubt whether standardisation of drugs was a contravention of this section could be laid aside now that standardised Pulverata were subjects of B.P. monographs); section three enacted that the article supplied must answer the description of what was known by its name in the trade; it was immaterial whether it was an official substance or not; section 4 set out defences that might be used in proceedings under section three; section five allowed the use of labels that had remained unaltered for forty-six years, or, in some cases, seven years, and defined the size of label generally; section six made it an offence to label a package or give any label or wrapper bearing any words that falsely described the contents or were calculated to mislead the purchaser, unless the seller proved he was unaware of this fact and could not with reasonable diligence have found out. Any person could take a sample and institute proceedings, but, if not a sampling officer, he would have to pay the analyst up to a guinea fee in advance. The sample must be divided into three parts and one part produced in court in any proceedings. Samples might be taken from automatic machines. Warranty was a protection for the retailer. What constituted a warranty had been simplified by wording in the new Act. A name or description

entered on an invoice would be deemed to be a written warranty that the food or drug to which the entry referred was of such a nature, substance and quality that a person could sell under that name or description without contravening any of the provisions of the Act or of regulations made thereunder.

Mr. W. Gee, in "A Criticism of the Council," said his criticisms were directed to the Council as a body. Among points he made was that the members of Council were too old. In organised business and the professions people were compulsorily retired at sixty to sixty-five, but there was no retiring age for members of Council. He thought it would be an improvement if there were. To the pharmacist in retail business the Council had given restrictions in plenty, and inspectors, but what had they done to encourage or forward the Chemists' Friends movement? In Air-Raid Precautions work doctors, dentists and nurses were specifically mentioned, but there was no mention of chemists. The Council must accept responsibility for this lack of recognition; they had failed to press the claims of pharmacy upon the Government departments. He criticised the complacent attitude of the Council in regard to co-operative societies. He stigmatised the new headquarters as the greatest blunder ever made by the Council; its cost, about £400,000, was excessive and out of all reason. It meant a permanent increase in overheads, rates, lighting, heating, etc. The building would be a millstone round the neck of pharmacy, and he feared it would lead to an increase in retention fees.

Mr. C. Gordon read a paper on "Employee Organisation in Pharmacy." He said that attempts had been made from time to time to form an organisation to deal with problems of employment in pharmacy. That these had not met with success was due mainly to lack of experience and central organisation. Success could only be achieved by a combination of employee pharmacists able to express the considered views of its members. The Association of Pharmaceutical Employees had been organised as a section of the National Union of Shop Assistants, Warehousemen and Clerks, which was linked up with the National Union of Professional Workers. Thus they had financial support and, what was more important, an organising machine controlled by experienced workers. At the conclusion of the discussion a vote of thanks to the contributors of the papers, proposed by Mr. E. Walters, was passed with applause.

## Insurance Act Dispensing

**Lancashire.**—The Insurance Committee, on February 20, confirmed a recommendation by the pharmaceutical service subcommittee that a chemist, who had dispensed a preparation that when analysed showed a deficiency of 14 per cent. of a poisonous ingredient, should be warned. A medical member of the committee moved an amendment that representation should be made to the Ministry that a substantial sum should be withheld from the chemist's remuneration. The amendment was lost, as was another amendment that a sum should be withheld. The chairman of the subcommittee said they had decided on a warning after the respondent chemist had given a demonstration in support of his contention that it was impossible to measure small quantities accurately. One of the chemists on the subcommittee said the respondent had rinsed out his measure and had not made sufficient allowance for the drops or water left at the bottom. Analysts, he added, had to make allowances for this reason. The lay members of the subcommittee had been satisfied by the chemist members that, though the respondent had not been as accurate as he might have been, nothing more than a warning was merited.

**London.**—The Insurance Committee on February 23 decided to represent to the Minister of Health that the continuance of a certain chemist as contractor on the Committee's list "would be prejudicial to the efficiency of the pharmaceutical service of the insured." The chemist is alleged to have delivered an ultimatum to the Minister of Health in the following terms:

"Yesterday I was handed for dispensing a prescription on a London Insurance Committee form bearing a name and address which were lies and/or a signature which was forged. This was later called for as a test sample. I give you till Wednesday next, January 25, to revise the system and bring it into line with the honourable methods one expects from an Englishman." The Clerk reported that the test sample was "as near 100 per cent. as he could make it," and the signature was not false. When a visit was made to the chemist's shop, the prescription form (with other documents) was displayed in one of the windows, with the notice "Moral re-armament—The great new game—spot a lie and catch it."

**West Sussex.**—The Insurance Committee, on January 27, agreed to recommend to the Minister of Health that £10 be withheld from a firm of chemists against whom a complaint had been received. The pharmaceutical service subcommittee reported that a representative of the firm and the assistant who dispensed the prescription (an unqualified dispenser) attended before them, and it appeared there were discrepancies in the dispensing of the tablets, one ingredient showing a discrepancy of 44 per cent. "It is apparent," they stated, "that no effort has been made by the firm to comply with the terms of service to keep in stock the tablets ordered, and we cannot but conclude that had not the tablets been required for a test no steps would have been taken to remedy the omission."



# Pharmacy's Wonder Hole

By George F. Corral



WORLD-WIDE interest, almost unparalleled, is being aroused by the publication of the observations of the trained observer at Brunswick Square concerning the progress of the Pharmaceutical Hole. Never previously had it been thought that a mere hole could establish such enthusiasm. But all "marvels" are capable of reasonable

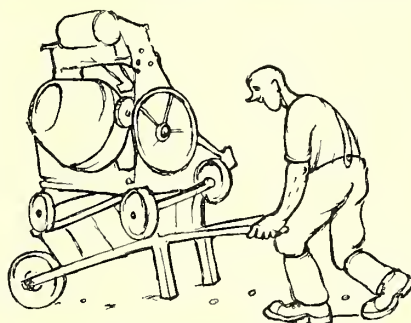
explanation, and I hasten to supply that by giving some information received from a quite private, but reliable, source. The *nom de plume* of this excitement-arouser is "Gaboriau Holmes"; but he uses it only on private matters, owing to his natural shyness. The "world" opened its mouth so wide that it nearly swallowed itself when it read about a month ago—at the time of writing of course (as a pharmacist one must be exact with regard to anything and everything outside pharmacy): "that the more the excavator excavated, the deeper and wider the hole become." I hasten to give Gaboriau Holmes the credit for such a discovery—no one had previously noticed such an obvious truth. His perspicacity is noticeable in this particular bit of advice: "As the ground is thick with mud, the wearing of bedroom slippers by observers is not particularly recommended." With ears pricked and eyes almost bursting from their sockets, the "world" waited with fear and trepidation for the next report. They were vastly relieved to learn that a new concrete mixing machine had been brought in to assist the human moles, and that it was going to be used for mixing concrete. The "world" slept that night in peace. Conducted tours are being arranged by pharmaceutical associations to view this world wonder hole, and as huge parties are expected an intending visitor is advised to put his name down early.

No effort has been spared in arousing enthusiasm in all ages of the community. This week the boys of the world have their share of excitement, for they have noticed the fact that hundreds of cubic yards of clay are being moved to make way for the foundations of the boiler house, and with that inexorable logic that all children (under twelve, of course) possess they reason: clay—marbles; colours of carboys (now defunct) *plus* clay=coloured marbles. Oh boy! Alley tors extra, of course. Their only fear is that the Government will step in, commandeer all the clay and the contents of old carboys, then make the marbles themselves and keep them in reserve for the children of poor people in densely populated areas to play with—to keep their minds preoccupied during the expected air raids. The boys continue to fear. Those intimately connected with the inner circles of official pharmacy are of the opinion that this clay could be put to better use in padding up

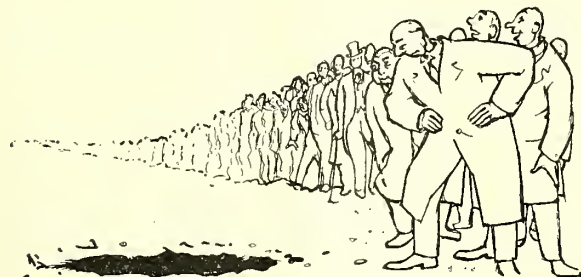
Scarcely C.F. brand, is it? This week a remarkable fact has been noticed by those individuals whose particular job it is to notice such things. The earth is wobbling on its axis; not only that, its orbit is becoming more sinuous weekly. A world conference has been called to consider this momentous fact and no expense is to be spared to solve this cyclopean puzzle. Experts will be experts, of course, so cannot be expected to consider the view of a cynic to the effect that this tremendous aberration is solely to be attributed to the laughter of the world on reading Gaboriau Holmes' epic pronouncement to the effect that "After one week's work the opening of the new home of pharmacy is brought one week nearer." Experts should come off the pedestal and consider the possible happening when the inevitable announcement comes that "After one month's work the opening of the new home of pharmacy is brought one month nearer."

It must have been very gratifying to Gaboriau Holmes to have been called in specially by the human moles to pass his opinion on a discovery that puzzled them. On getting deep into the gravel they noticed a stone of a very peculiar shape sticking out at an angle of 45°. Carefully they removed the ordinary gravel from close proximity, and, on further investigation, discovered this stone to be resting in a big circular hollow stone. About two yards away was a similar thing, but only half size. The whole gang knocked off work to investigate and discuss the situation. The foreman, bearing in mind contract time, was none too pleased and shouted for Gaboriau Holmes. "Gaboriau Holmes," shouted the gang, *forte fortissimo*. Gaboriau, all agog with excitement, rushed (all experts are expected to rush) to the scene, produced his stamped scales and metric rule and got to work. His excitement was intense. His pebbled spectacles slipped farther down his nose. His hat slipped backwards at a perilous angle; then, slowly and solemnly, he

rose to his feet and announced his conclusion. "Boys," he said, "the Council of the Pharmaceutical Society will be eternally indebted to you for having confirmed their prescience—here the men looked vacantly at each other—in selecting this site. We are now standing on the spot where stood a prehistoric pharmacy. What you have discovered are two early pharmaceutical pestles and mortars. Not having the means we have, our ancestors made the best of things by using the knob end of a thigh bone as pestle and they joined two pelves to form the mortar. They even indicated the future division of pharmaceutical status. The big one was obviously used by a Major man and the small one by a Minor." Here, unfortunately, on stepping back to get the discoveries in better perspective, Gaboriau failed to remember the deep trench behind him. He fell in and broke his

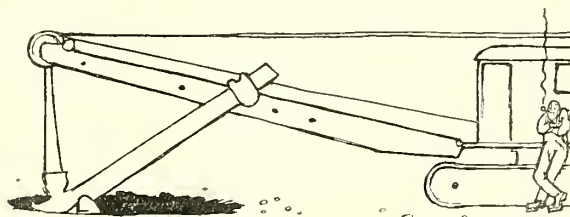


The concrete mixing machine for mixing concrete



Conducted tours to view the wonder hole.

the boilers; lest they share the enthusiasm of those assembled for the official opening ceremony and are unable to contain themselves. After all, not even the most pedantic of label lickers wants to emulate Elijah assisted by a boiler plate.



The more the excavator excavated...

neck. From that moment the earth resumed its usual course, much to the disappointment of the experts. He was accorded a mass funeral, as due to a great man, and the most noticeable wreath was the one contributed by the human moles, who had, tactfully, got the constituents—for nothing—from a well-known importer of Spanish juice made in Italy.



# Trade Notes

**EVERFAST NAIL BRUSH.**—The Everfast nail brush, which is new in design and practical in use, was advertised in last week's *C. & D.* This brush is produced by Addis of Hertford in Catalin material. (Corrected Note.)

**HALEX BONUS OFFER.**—A bonus offer on Halex toothbrushes is open until March 25 on display conditions which are detailed in our advertisement pages. Halex brushes may be obtained from the usual wholesalers or from Halex, Ltd., Hale End, London, E.4.

**AGENCY APPOINTMENT.**—Koray, Ltd., Gillespie Road, London, N.5, inform us that they have been appointed sole agents for Casali Alpha and Beta. The retail price of Casali Beta remains unchanged, but Casali Alpha has been increased in price to 7s. 6d. per bottle.

**FIVE-DAY WEEK.**—Meggeson & Co., Ltd., Llewellyn Street, London, S.E.16, inform us that they are again beginning their five-day week for the summer period. The factory will, therefore, be closed on Saturdays except for a skeleton staff, and chemists are asked to confine their orders to these days.

**YEAST-PAC DISTRIBUTORS.**—Yeast-Pac Co. have appointed Newbery & Phillips, Ltd., 31 Banner Street, London, E.C.1, to be sole distributors of Yeast-Pac beauty masks in the United Kingdom. Terms and prices remain unchanged. This beauty pack is issued in three sizes containing 1, 3 and 7 sachets respectively. A new bonus scheme will shortly be announced.

**SCIENTIFIC FEEDING OF DOGS.**—Cooper, McDougall & Robertson, Ltd., Berkhamsted, Herts., have introduced a new food supplement for dogs described as Admin, which supersedes Cooper's vitamin ration, stocks of which will be replaced free of charge. Admin is packed in cartons of two sizes and also in large tins. Full details are given in our advertisement pages.

**OBSTETRIC CALCULATOR.**—Trufood, Ltd., Wrenbury, Cheshire, have introduced a new and improved edition of their obstetric calculator which has been distributed to medical men, nurses, welfare workers, etc., throughout the country. The calculator, which measures  $4\frac{1}{2}$  in. by 3 in., presents a revolving disc which gives the required information in accordance with the directions.

**DESIBYL CAPSULES.**—Parke, Davis & Co., Beak Street, Regent Street, London, W.1, have added Desibyl capsules to their list. These products contain desiccated whole bile in a readily soluble form. The capsules, which are hermetically sealed, are indicated when an effective natural bile product is required. The dose is two to three capsules; two being approximately equivalent to 5 c.c. of fresh natural bile. They are supplied in bottles of fifty.

**SANTANO SANITARY SHIELD.**—Herbert Fromm, 21/31 Oxford Street, London, W.1, has introduced a hygienic washable protector which is made in Britain and can be used in conjunction with all makes of sanitary towels. Weighing only one ounce, it is made from oil silk in two sizes and packed in a transparent paper cover. A campaign of national advertising in women's journals is planned to commence at an early date.

**BROOKLAX WINDOW DISPLAY.**—Simultaneous window displays for Brooklax took place in Ipswich during February, and first and second prizes of two guineas and one guinea respectively were awarded to Mr. L. Piper, St. Nicholas Street, and to the executors of J. A. Symonds, 16 Upper Brook Street. Consolation prizes were awarded to Messrs. R. W. Wardman, High Street, Bures, and Messrs. G. W. Hales, 47 Wherstead Road. Brooklax is a product of Westminster Laboratories, Ltd., 4-12 Palmer Street, Westminster, London, S.W.1.

**GUITAROSE BONUS OFFER.**—Chemical & Natural Products, Ltd., Wimbledon Factory Estate, Morden Road, London, S.W.19, advertise a bonus offer on Guitarose, a new transparent rouge, which is stated to blend perfectly, improve the texture of the skin and remain on all day. Guitarose, together with the lipstick, puts a matched make-up within the reach of every woman in the country. Full details of the bonus scheme are given elsewhere in this issue. Display material may be obtained from the distributors.

**TREATMENT OF SCHIZOPHRENIA.**—C. H. Boehringer Sohn have introduced a new preparation in ampoules containing 0.1 to 2 c.c. described as Azoman which is a 3-ethyl-4-cyclohexyl-1,2,4-triazol. The ampoules will be issued in packings of 6, 30 and 100, and supplies may be obtained through the usual wholesalers or from Chas. Zimmermann & Co., Ltd., 9 and 10 St. Mary-at-Hill, London, E.C.3.

**INDUSTRIAL BROCHURE.**—Welwyn Garden City, Ltd., Welwyn Garden City, Herts, send us a copy of the illustrated brochure describing industry at Welwyn and indicating the advantages of this town as a centre of industry. Many firms of interest to the trade have their factories at Welwyn, including Beiersdorf, Ltd., Carnegie Chemicals (Welwyn), Ltd., Francis Newbery (Charterhouse), Ltd., and Roche Products, Ltd. The brochure is printed in two colours and profusely illustrated.

**PEARS' GIFT BOX.**—A national advertising campaign directing attention to the Pears' gift box which was referred to in these pages recently, *C. & D.*, February 18, p. 180, is in progress in a large number of papers mentioned elsewhere in our advertisement pages. Chemists are invited to display the gift box of Shuffled Symphonies, a new Disney card game, in their windows and so share in the increased demand which is anticipated. An imposing and colourful three-panel screen together with window bill will be sent with each order. Full details are given elsewhere in this issue, and chemists are asked to write to A. & F. Pears, Ltd., The Soap Works, Isleworth, Middlesex. As mentioned previously, the gift box contains two tablets of Golden Glory soap and a packet of Shuffled Symphonies, the new Walt Disney card game.

**STOKES' WATER STILL.**—We have received from Apex Construction, Ltd., Swan House, 133-135 Oxford Street, London, W.1, the British technical representatives of the Stokes Machine Co., Philadelphia, a descriptive leaflet of Stokes' water stills. We are informed that during the past five years intensified efforts have been made in modernising the Stokes' stills. Every model has been re-designed, new and exclusive features adopted, and new models added to the series. The improved Stokes' stills produce a higher quality distilled water, both for the plant or the laboratory. In smaller sizes, a Pyrex glass cover facilitates observation and cleaning. The de-concentrator, a controllable device which flushes out the concentrated impurities which collect in the boiling chamber, reduces foaming and scaling, and often obviates cleaning altogether. Enamelled and chromium-plated surfaces now give a pleasing and cheap upkeep finish. These stills are shown at the test laboratory at Swan House.

## Parliamentary News

### SHOPS BILL

A private member's Bill "to amend the Shops Acts, 1912 to 1936," which came up for its second reading in the House of Commons on February 24, was rejected by 135 votes to 114.

### CO-ORDINATION OF SOCIAL INSURANCE SERVICES

A motion introduced into the House of Commons on February 22 to institute an inquiry as to how the services relating to sickness, unemployment, widowhood and old age can be co-ordinated was negatived by 172 votes to 149.

### ADVERTISEMENTS RELATING TO CANCER

Mr. Groves asked the Minister of Health on February 27 whether it was his intention to prohibit, under Clause 4 of the Cancer Bill, registered medical practitioners from referring to any article calculated to lead to the use of that article in the treatment of cancer, when speaking to audiences or writing for groups of people composed of persons other than those mentioned in the relevant sub-section.

Mr. Walter Elliot: In so far as such statements as the hon. Member has in mind could be held to be advertisements, I am advised that, subject to the exceptions contained in Sub-section (5), the effect of the Clause is as stated by the hon. Member.



## Personalities

COUNCILLOR J. A. HARE, Ph.C., Hexham, has been elected president of the local literary association.

MR. J. A. JOHNSTONE, M.P.S., Wallingford, has been elected to the committee of the local chamber of trade.

MR. R. BONNER WILLIAMSON, M.P.S., F.B.O.A., has been appointed advertising manager to Endocrines-Spicer, Ltd., manufacturing chemists, Watford.

MR. LEO HUDSON, a director of the Southern Cross Distributing Co., distributors of proprietary products, Johannesburg, South Africa, will be visiting England on business in April.

MR. ERNEST T. NEATHERCOAT, C.B.E., Ph.C., J.P., treasurer of the Pharmaceutical Society of Great Britain, has been appointed chairman of the Prince of Wales's General Hospital, Tottenham, London, N.15.

At a recent meeting of the North-East Midland Prescription Bureau Joint Committee, Mr. A. S. Birkbeck, M.P.S., was appointed chairman and Mr. H. C. Lee, J.P., M.P.S., vice-chairman. This is the first time that both the chairman and vice-chairman of this committee have been pharmacists.

MR. M. M. STERLING, president, E. Fougere & Co., Inc., New York, arrived in London on March 2 to consult with British manufacturers and exporters regarding the proposed Federal Food, Drug and Cosmetic Act. British firms interested can get in touch with Mr. Sterling at the Park Lane Hotel, London, W.1, or at the offices of Biddle, Sawyer & Co., Ltd., Empire House, St. Martin's le Grand, London, E.C.1.

MR. D. G. POUT, Barbourne, Worcester, who was recently elected chairman of the Worcestershire and Herefordshire Branch of the Pharmaceutical Society, celebrates this year his silver jubilee as secretary of the County of Worcester Pharmaceutical Committee. He was for a considerable time secretary and treasurer of the Worcester City and County Pharmacists' Association. Mr. Pout is at the present time a member of the Worcestershire and Worcester Insurance Committees, of the West Midland Joint Pricing Bureau, and of the Tuberculosis and Sanatorium Committee of the Worcestershire County Council. He served his apprenticeship at Whitstable, Kent, and before going to Worcester held appointments in London, Torquay, Teignmouth, Guy's Hospital, and at the Pharmacie Guisner, rue d'Antibes, Cannes, France. Portrait, p. 229.

## Deaths

FARR.—Recently, Mr. Francis William Farr, M.P.S., Dunsford Road, Wimbledon, London, S.W.17, aged fifty-nine.

FILMER.—Recently, Mr. John Honeywood Filmer, M.P.S., Victoria Road, St. Budeaux, Plymouth, aged eighty-three.

GARE.—At Southsea, recently, Mr. George Henry Gare, Ph.C., aged sixty-nine. Mr. Gare was formerly in business at Lynton, Hants.

HARROWER.—Recently, Mr. William Neilson Harrower, M.P.S., Hillside, Walkerburn, Peebles, aged twenty-six.

HOGARTH.—On February 23, Mr. John Tom Hogarth, M.P.S. (Hogarth & West, Ltd., chemists, Stokesley, Yorks). Mr. Hogarth, who passed the Pharmaceutical Society's Minor examination in 1900, had been in the locality for thirty-six years. He was a P.M. of the Cleveland Lodge of Freemasons, P.P. of the Dundas Chapter, and a past provincial officer of the Craft and the Royal Arch.

JAMIESON.—Recently, Mr. George William Arthur Jamieson, M.P.S., Marlow Road, London, E.9. Mr. Jamieson qualified in 1914.

JENKINS.—Recently, Mr. David Thomas Jenkins, M.P.S., Queen Street, Pembroke Dock, aged sixty-three.

LANDAUER.—Suddenly, in London, on February 28, Mr. Hermann Dagobert Landauer, aged fifty-eight. Mr. Landauer was the founder of the important wholesale drug merchandising company in Hamburg bearing his name. He was of Swiss nationality. Recently, owing to political conditions, he came to London with the object of taking up a partnership in John Ronaldson & Co., 15 Seething Lane, London, E.C.3, who had acted as his London agents for many years.

Mr. Landauer had travelled extensively and had built up an international connexion in the drug trade. His activities in the Mincing Lane markets had resulted in considerable export business coming to London.

LEITCH.—At Claremont Nursing Home, Belfast, on February 22, Mr. Andrew Leitch. Mr. Leitch was for half a century connected with Grattan & Co., Ltd., University Road, Belfast. A native of Scotland, he was one of the best-known personalities in pharmacy in Ulster and beloved by all who knew him. An ardent golfer, he was a foundation member of Ormeau Club. Mr. Leitch also took a prominent part in Freemasonry in Belfast, being a P.M. of Ultonia Lodge, No. 29. A. W. (28/2) writes: "Mr. Leitch was a raconteur of unusual ability and possessed of a mind enriched with a deep literary experience. To be in his company of an evening or in his presence at the dinner table was a pleasure to be remembered, for to know Andrew was to love him."

McGUFFIE.—At Glasgow, on February 25, Mr. David McGuffie, M.P.S., Glasgow Road, Burnbank, Hamilton. Mr. McGuffie passed the Minor examination in 1901.

PIKE.—Recently, Mr. Herbert William Pike, M.P.S., Hatfield Road, St. Albans, aged fifty-nine.

RALPH.—On February 27, Mabel Louise, the wife of Mr. W. Ralph, Ph.C., Burnt Ash Hill, Lee, London, S.E.12.

SAUNDERS.—Recently, Mr. William John Saunders, M.P.S., Salmon Lane, London, E.14, aged sixty-nine.

STEDMAN.—Recently, Mr. Arthur Stedman, M.P.S., Snodland, Kent. Mr. Stedman passed the Pharmaceutical Society's Minor examination in 1889.

STEVENS.—Recently, Mr. James Stevens, chemist and druggist, Napier Road, Gillingham, Kent, aged eighty-seven.

SURFLEET.—At Worthing, on February 20, Mr. Arthur Frederic Surfleet, Ph.C., South Street, Lancing. Mr. Surfleet passed the Pharmaceutical Society's Minor examination in 1893 and the Major in the following year.

## Recent Wills

MR. RICHARD HENRY ARMOUR, Ph.C., Abbeyleix, Queens County, Eire, left personal property in England and Eire valued at £2,098.

MR. DAVID LOW, Hexham, a director of Low & Hare, Ltd., chemists, who died on October 20, 1938, left £13,044, with net personalty £12,034.

MR. SYDNEY MORGAN, Elvaston House, Shere, Guildford, formerly a director of C. R. Harker, Stag & Morgan, Ltd., London, E., who died on January 18, left estate of the gross value of £934, with net personalty £759.

MR. ARTHUR JOSEPH WING, M.P.S., 19 Elderslie Road, Eltham, Kent, and of 60 Powis Street, Woolwich, London, S.E.18, who died on December 19, 1938, left property of the value of £14,009, with net personalty £12,989.

MR. MATTHEW HERROD, M.P.S., The White Lion Hotel, Wisbech St. Peter, Cambs, and a former Mayor of the borough, who died on November 7, 1938, left property in Great Britain of the gross value of £10,932, with net personalty £18.

MR. JOHN HOBBS, 22 Westrow Gardens, Seven Kings, Ilford, late general manager of Stafford Allen & Sons, Ltd., manufacturing chemists, London, who died on February 3, left property of the gross value of £5,597, with net personalty £5,338.

MR. KENNETH GEORGE SHAW, Forest House, Forest Ridge, Keston, Kent, and formerly of 59 Bunhill Row, Finsbury, E.C., director of The British Drug Houses, Ltd., who died on December 26, 1938, left £7,515, with net personalty £4,307.

SIR ROBERT LUDWIG MOND, LL.D., F.R.S., J.P., 9 Cavendish Square, W., son of the late Dr. Ludwig Mond, one of the founders of Brunner, Mond & Co., Ltd., who died in Paris on October 22, 1938, left estate of the gross value of £392,964, with net personalty £252,443.

MR. EDWARD BROTHERTON-RATCLIFFE, The Tower, Hayes Lane, Kenley, Surrey, formerly of 44 Duchy Road, Harrogate, founder of Brotherton-Ratcliffe & Co., Ltd., chemical merchants, and a director of Lysol, Ltd., who died on October 30, 1938, left £96,563, with net personalty £90,640.



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# THE CHEMIST AND DRUGGIST

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### The Next Council Election and After

WITH little more than two months before the next Council election takes place, there is at present little sign of newer and younger candidates coming forward to contest the seven seats which are due to be vacated. The retiring councillors are Messrs. Deacon, Guthrie, Hirst, Howells, Jack, McNeal and Neathercoat. Of these seven, it is probable that at least two of them, and possibly a third, may not seek re-election, and while territorial representation is not officially viewed with favour, it may be taken for granted that it will in effect be recognised. If there are important Council changes to be expected this year, it is almost a certainty that next year there will be further resignations from the Council, and it is pertinent to ask what is likely to become of the councillors' assurances made so many times that it will not be necessary to increase registration fees for the support and upkeep of the new building. Pharmacists are being asked to spread over contributions for a period of seven years, but in this period many changes will have taken place in the Council, and after seven years—what? Can the Pharmaceutical Society, whose accumulated funds are invested in the building, stand the heavy strain which will be imposed upon its finances in the upkeep of the building and at the same time carry on with enterprises which cost considerable sums while leaving registration fees as they are at present? Future councillors are unlikely to feel themselves bound by the optimistic assurances of those who are at present making official promises.

Already, since the appeals for more money for the Building Fund were launched, one or two branches have made the suggestion that present fees be increased. In this way, the contribution would be imposed on all alike. This procedure, however, would throw a fierce light on the councillors' expenditure, and it would not be surprising to find an outcry against the expenditure of money on unremunerative projects. According to the public state-

ment of income and expenditure for the year ended December 31, 1937, there was a deficit on the pharmacological laboratories of over £4,000. The school of pharmacy shows on the debit side a similar sum. The loss on the weekly journal amounts to approximately £13,000 a year. These three items alone, therefore, are costing pharmacy well over £20,000 a year. Examination fees show a fair margin of profit, but income tax has to be deducted, and at the present time the whole subject of income tax is one which is giving rise to considerable anxiety. The staff has increased enormously within the last fifteen years, and sooner or later a halt must be called to the spending which it would be difficult to justify in terms of benefits to pharmacists.

Much has been made of the recognition by the Government of the Pharmaceutical Society in so far as a special register is to be compiled by the official body and paid for by the Government in a sum of £500 for preparation of the register and £750 per annum for its maintenance. No one is expected to inquire as to the object of this register, but the matter in a nutshell is that the register is required so that an adequate pharmaceutical dispensing service may be maintained for insured persons. If there were anything further to come of it, it would be interesting to know its nature. The pharmacist has been told that his place in regard to air-raid precaution work is in his shop. He appears to have no hope of obtaining commissioned rank as a pharmacist in His Majesty's forces. One may well ask, therefore, what is the need of pharmacological laboratories to pharmacists whose recognition is based on their ability to dispense insurance prescriptions and whose horizon in the army is limited by three stripes? This is one question which will have to be answered probably before the seven years' period for subscription ends.

Let it be added while everyone is agreed as to the need for another building to house pharmacy, there is a growing number of pharmacists who will agree with Mr. Gee, of Manchester (*see p. 238*) in his criticism of the Council. He is reported to have said that the new headquarters is the greatest blunder ever made by the Council; its cost of about £400,000 was excessive and out of all reason. The building, he added, would be a millstone round the neck of pharmacy. As the councillors who are responsible for this millstone silently wend their way from the Council, there may be difficulty in obtaining new men to come forward and endeavour to grapple with what will certainly constitute a formidable burden to pharmacy for many years to come.

### Wages during Illness of Employees

EMPLOYERS and employees of all classes will be vitally affected by the important decision which the Court of Appeal has recently given in the case of *Marrison v. Bell*. The Court held there that a salesman who was absent from work for a period of about 16 weeks owing to illness was entitled to recover from his employer his full wages during that period; and further that no deduction was to be made from the wages of the amount of sickness benefit which the employee might have been receiving during the same period. This decision no doubt will come as a shock to many employers; for in some cases no wages at all have been paid to employees during their absence owing to illness, while in other cases the amount of the sickness benefit has been deducted. It may be convenient to review the whole position very briefly. Illness does not put an end to the contract of service between an employer and employee.



The contract continues and the employee still enjoys the right to draw his wages during his absence from work. A distinction, however, must be made between temporary and permanent incapacity. When an employee is permanently incapacitated so that it is virtually impossible for him to get back to work, except after a very long interval of time, if ever—as, for example, where the employee is paralysed and becomes bedridden—then the contract of employment may be regarded as becoming automatically discharged upon the illness supervening. It is otherwise, however, where the incapacity is merely temporary, though for this purpose an illness even for months may be regarded as temporary incapacity. In the latter case, the employment, as we have already stated, continues, but it is open to the employer to terminate the employment whenever he chooses, though only after giving the proper notice. One consequence of the above decision may be that there may be in the future a tendency among employers to give notices to sick employees, so as not to run any risk of being liable for wages, especially where the illness may be prolonged, and the effect of the decision may not in the long run be really in the interests of employees generally. But in order to mitigate any such hardship, it may be that employees would be content to enter into express agreements with their employers, limiting the latter's liability for wages in the event of the employee's absence through illness. There is nothing to prevent such a contract from being made, and an employer thus effectively safeguards himself from any such liability for wages. It should be pointed out, however, that it would be advisable, even though it may not be absolutely necessary, that an express contract in writing should be signed by each employee, for it is doubtful whether the employee would be bound by the existence of a rule or custom or practice of the trade, limiting an employer's liability for wages during an employee's illness. In conclusion, it may be of interest to contrast the position between workmen's compensation and National Health benefits. The latter are additional benefits, and the employee, as the Court of Appeal has just pointed out, is entitled to them in addition to his full pay. It is otherwise, however, as regards workmen's compensation. Such compensation is in lieu of part of the wages of the injured employee, so that where an employee meets with an accident and receives workmen's compensation during his absence from work, the employer is entitled to deduct the amount of this compensation from the wages payable to his employee during the same period, so long as the contract of employment is subsisting.

### A Momentous Vindication

ELSEWHERE in this issue, p. 234, we give the concluding evidence and the judgment in a case which is perhaps one of the most important affecting a pharmaceutical house for many years. We refer to the action brought by Michael O'Kenneally, a teacher of Irish at Ring College, Dungarvan, co. Waterford, against The Wellcome Foundation, Ltd., London. After a hearing which lasted twelve days, the action was concluded before Mr. Justice Conor Maguire and a jury in the High Court of Dublin on February 23, when a verdict in favour of The Wellcome Foundation, Ltd., with costs, was returned. The case was brought by Mr. O'Kenneally to recover damages for the death of his daughter, Susan, and injury to his three sons, James, Nicholas and Lawrence, following inoculation against diphtheria with toxoid-antitoxin floccules (T.A.F.), which was made by The Wellcome Foundation, Ltd., at the Wellcome Physiological Research Laboratories at Langley Court, Beckenham, Kent. It was alleged that the children contracted tubercular disease following inoculation and that the T.A.F. was responsible. The Wellcome Foundation denied

negligence and held that the T.A.F. supplied contained no poisonous or harmful ingredients. The doctor who gave the injections, Dr. Daniel T. McCarthy, was also named as a defendant, but earlier in the hearing the Judge gave a direction in his favour.

Uppermost in the minds of all who have followed the evidence published at length in *THE CHEMIST AND DRUGGIST* must be the feeling of sympathy for the bereaved parent who has lost one of his family in such distressing circumstances and whose other three children have been affected. The verdict, however, is one which will be learnt with the greatest satisfaction, not only because of the challenge to a great organisation in relation to the products issued, but also because of the far-reaching possibilities which a verdict against The Wellcome Foundation might have had on the whole progress of medicine so far as serological work is concerned. It may indeed be said that in contesting this case so thoroughly The Wellcome Foundation has fought not only on behalf of their own good name in the medical and pharmaceutical worlds, but also on behalf of all manufacturers of serological products who might equally become involved in an action of this kind. In the course of the evidence, it was shown that so far as The Wellcome Foundation was concerned, they had never avoided this inquiry but were desirous that the responsibility for the unfortunate infection should be traced to its source. It is for our purpose sufficient to say that it was proved conclusively and beyond all doubt that the source of infection was not in the product issued from The Wellcome Physiological Research Laboratories. Witnesses whose names are well known in medicine were called to testify to the minute care taken in the production of serological products. In the vindication of the products themselves, however, there comes to light the danger to which any patient may be subjected unless adequate precautions are taken from the time the phial of serum is opened until after the injection is made.

During the course of the evidence, it was pointed out that The Wellcome Foundation, Ltd., does not operate for profit but for the advancement and benefit of medical science. This is in consequence of the unusual bequest of the late Sir Henry Wellcome, who directed in his will that the income of The Wellcome Foundation, Ltd., be devoted to the endowment of scientific research and to the upkeep of scientific institutions. Burroughs Wellcome & Co., together with the various research institutions which constitute The Wellcome Research Institution, housed in the handsome building in Euston Road, London, N.W., is merged in The Wellcome Foundation, Ltd., and the firm operates commercially on its behalf. This unique scheme, which is believed to be the first of its kind in commerce, is controlled by five trustees, two of whom are men of medical science and two men of administrative and business experience. The two medical trustees are Sir Henry Dale, director of the National Institute of Medical Research, and Professor T. R. Elliot, M.D., London University. It may be added that at one time Sir Henry Dale himself was associated with The Wellcome Physiological Research Laboratories.

### “Free and Easy” Poisons

At an inquest held on February 24 at Blaenavon, Monmouthshire, on a student at West Monmouthshire School, Pontypool, questions were raised regarding the control of poisons in school laboratories. According to the evidence, senior students at the school who required poisons went simply to the cupboard and fetched them. Further, boys in elementary classes could have access to poisons, although they were not allowed in the laboratories themselves. In answer to the coroner's question, the laboratory assistant stated that potassium cyanide to kill butterflies could be removed without his knowledge. The comments of the coroner are interesting. In his view, they could not attribute negligence to the school authorities, and certainly not criminal negligence. If the unfortunate incident had happened in a chemist's shop, it is doubtful whether any coroner would have expressed an opinion so satisfactory as this one must be to the authorities. Obviously, if any student can obtain access to poisons in order to commit suicide, this in itself is evidence of negligence on the part of some person or persons. Censorious comments are commonplace at coroner's inquests where chemists are concerned, and it is difficult to understand why negligence may be laid at the door of the chemist and not in cases of this sort.



# Chemistry of Sugars

THE sugars provide examples of natural syntheses that man has been unable to accomplish despite the extraordinary advances made during recent years as regards the chemistry of the sugars. Thus, while owing to the present-day surplus amounting to millions of tons per annum, sucrose (cane sugar or beet sugar), the most important sugar in commerce, can be bought in bond for less than one penny per lb.,

in photosynthesis corresponds to the assembly of six form-aldehyde ( $\text{H}\cdot\text{CHO}$ ) units into  $\beta$ -glucopyranose. This sugar is readily transformed into isomeric forms, including furanoses. The perspective formulae are useful in visualising the arrangement of the H and OH groups above and below the plane of the carbon-oxygen ring (Fig. 2, foot of col. 1).

The older (plane) formulae are more convenient for following the mechanism involved in the interconversions of the sugars, especially when the carbon atoms are numbered in conventional manner from the reactive end of the molecule (see Fig. 3). The difficulties to be overcome in

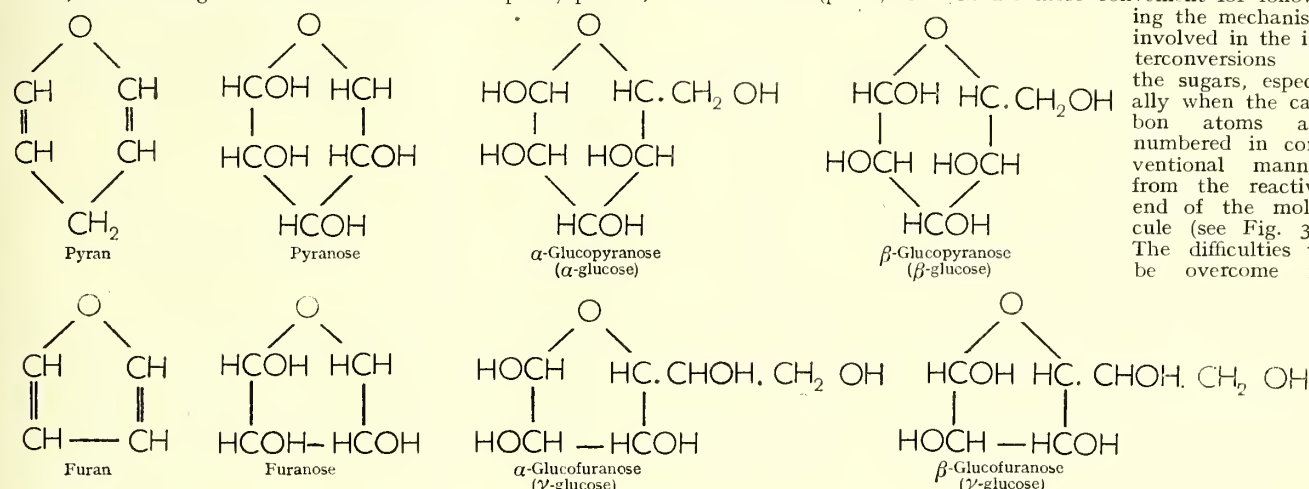


Fig. 1

yet scientists have been unable to synthesise a single ounce. The facility with which plants can form a single stereochemical configuration such as  $\beta$ -*D*-glucose as the first product of photosynthesis is in striking contrast to the racemic (*D*- and *L*-isomers) which invariably result from artificial synthesis. Again, the manner in which glucose units are transformed into more complex carbohydrates (di-saccharides and polysaccharides) still eludes discovery; nevertheless, much light is thrown on the problem by a study of the ease with which the molecule of *D*-glucose and its isomers are interconvertible. Such phenomena have a bearing on the chemistry of life, since the motive power of living processes is ultimately derived from the oxidation of glucose.

## The New Nomenclature

Research during the past decade has revealed that the tautomeric changes denoting the conversion of one stereoisomer into another is readily explained, as regards the simple monosaccharide or hexose sugars, by the opening and closing of carbon rings. A new nomenclature based upon such cyclic constitution relates the sugars to the ring compounds known as pyran and furan and simplifies the understanding of sugar chemistry by dividing sugars into two types known as pyranoses and furanoses respectively. The graphic formulae above show that the pyran compounds contain five carbon atoms and one oxygen atom in a six-membered ring. Furan derivatives have only four carbon atoms and one oxygen atom in a five-membered ring. The relationships between pyran, pyranose and the glucopyranoses; furan, furanose and the glucofuranoses are represented by the configurations shown in Fig. 1.

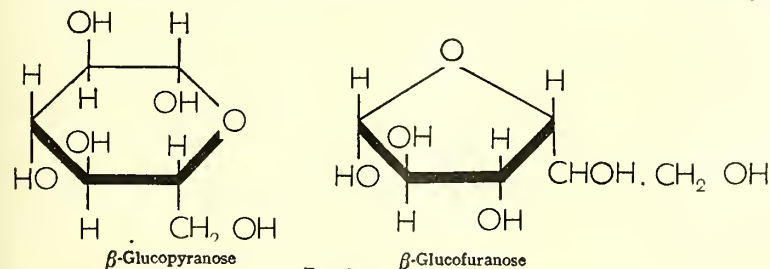


Fig. 2

Dextrose (the name is an abbreviation of dextro-glucose) is the most widely distributed sugar in nature, and its formation

determining the stereo-chemical structure of *D*-glucose are evident from the fact that simple solution of  $\alpha$ - or  $\beta$ -*D*-glucose in water gives rise to several molecular species.

The pyranose formula (Figs. 1 and 2) corresponds to the amylene-oxide structure of Howarth (Fig. 3, top of next page) and the earlier butylene-oxide configuration of Tollens conforms to that for furanose. The controversy as to which of these was right has been settled in favour of their being interconvertible. The original aldehyde structure (Bayer, 1870) also finds a place in the scheme of spatial rearrangements of the glucose molecule.

## Interconversion of Sugars

The dynamic isomerism or interconversion of sugars is brought about by the formation of a common intermediary known as an "enol" which is an open-chain hydroxyaldehyde. The problem of sugar chemistry was complicated by the fact that enol and aldehyde forms have only a transitory existence which makes their detection virtually impossible. Nevertheless, enol formation enables three types of rearrangements to be explained as different forms of dynamic isomerism, viz.:

- (1) Mutarotation or mutual conversion of  $\alpha$ - and  $\beta$ -isomers.
- (2) Pyranose-furanose transformations.
- (3) Glucose-maltose-fructose interconversions.

The phenomenon of mutarotation was first observed by Dubrunfaut in 1846, but it was difficult to understand until Tanret in 1895 prepared two forms of glucose:  $\alpha$ -glucose  $D + 110^\circ [\alpha]$  and  $\beta$ -glucose  $[a]_D + 19^\circ$ . These sugars on dissolving in water show decrease and increase respectively in optical rotatory power until the value  $[a]_D + 52.5^\circ$  is attained. It is now recognised that such change in optical rotation accompanies the spatial inversion of H and OH groups attached to carbon atom 1 in the glucopyranose (Fig. 2) or amylene oxide (Fig. 3) ring. The reversible exchanges are effected through the enol form and are symbolised in conventional manner by reversed pointers in the expression  $\alpha \rightleftharpoons \beta$ -glucose, which represents the continuous mutation of H and OH configurations at carbon atom 1. Investigation of the mechanism of the interconversion revealed that the medium plays an all-important part in the process, the water contributing both acidic (H) and basic (OH) ions in the exchanges which take place continuously between dissolved substances and the solvent. The state of equilibrium finally reached represents a condition in which the mutual molecular decomposition and

re-formation of the two stereoisomers ( $\alpha$ - and  $\beta$ -) are in balance. The designation  $\alpha$ - is given to the form of sugar (such as glucopyranose) in which the hydroxyl groups attached to

position (see  $\beta$ -glucopyranose, Fig 2) and illustrates how plants can synthesise a specific stereochemical structure, though this readily changes into other dynamic isomers (cf. Fig. 3).

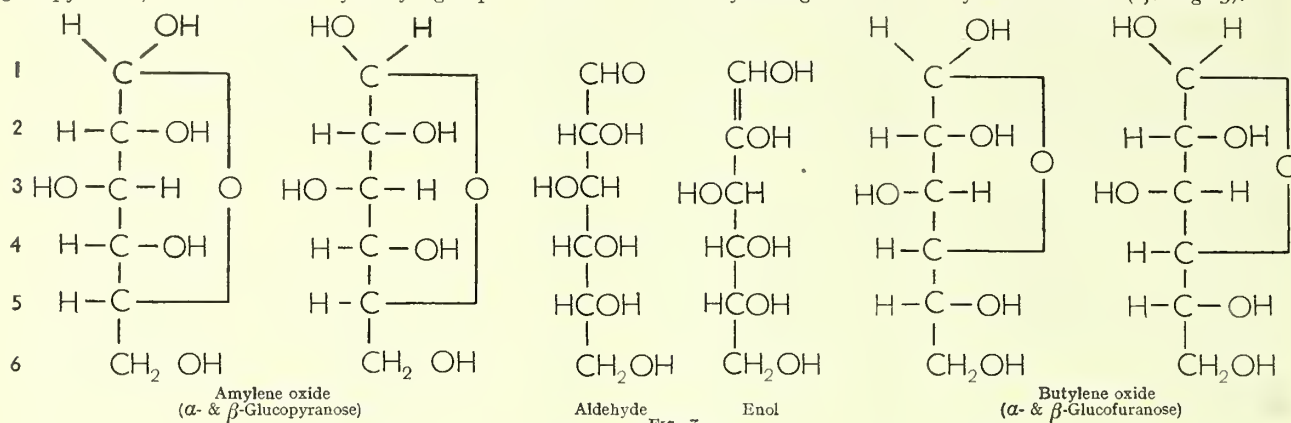


FIG. 3

carbon atoms 1 and 2 are arranged on the same side of the ring. The glucopyranoses and glucufuranoses effect tautomeric transformations by opening of the carbon ring (at position 1:5 or 1:4) to produce the enol form which in turn, on re-closure, produces a glucopyranose by 1:5 linkage or a glucufuranose by 1:4 ring-formation. The production of four- and three-

SUCROSE was formerly regarded as the primary plant sugar, but evidence is available that increase in sucrose follows production of glucose after part of the latter has been changed into fructose. The structure of sucrose has been the subject of much research and controversy, but the glucopyranose-fructofuranose configuration of W. N. Haworth (Fig. 5) is regarded as providing a satisfactory solution of this difficult problem.

Sucrose is the form in which sugar is translocated in the plant. Unlike most sugars, it crystallises readily, owing to the fact that it is stable in aqueous solution (i.e., it does not undergo tautomeric transformations into isomeric disaccharides).

The glucose and fructose units are known as reducing sugars owing to the active (aldehyde) group of *d*-glucose and the dynamic (ketonic) group of *d*-fructose reducing the potassium cupric tartrate of Fehling's solution to cuprous oxide. The formula for sucrose (Fig. 5) shows that the reactive aldehyde and ketonic groups are eliminated in the union of the two hexose units so that sucrose is not a reducing sugar. Dilute acids or the enzyme invertase hydrolyse sucrose into invert sugar, which is so called because it is laevorotatory,  $[\alpha]_D -20^\circ$ , as compared with dextrorotatory sucrose  $[\alpha]_D +65.5^\circ$ . The fructofuranose first yielded on hydrolysis is the labile or  $\gamma$ -form of fructose, which reverts to  $\alpha$ - and  $\beta$ -

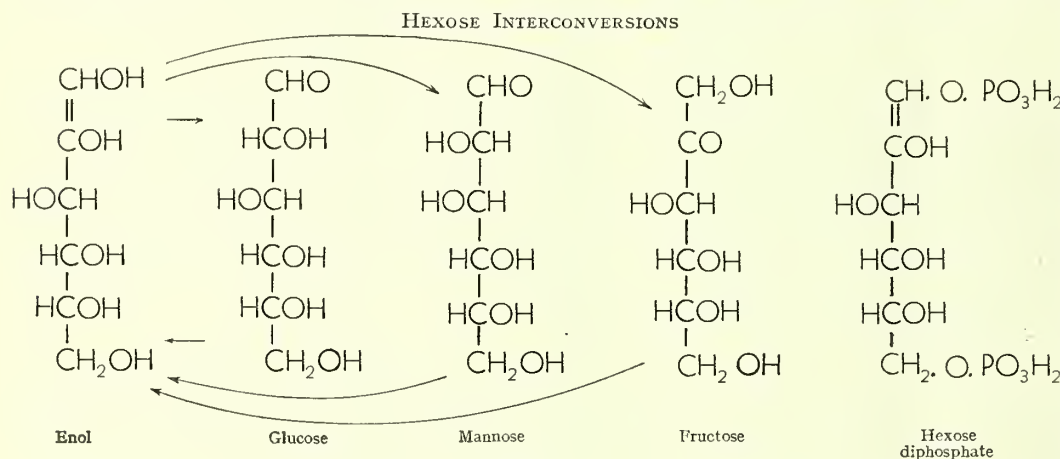


FIG. 4

membered rings is possible theoretically, but inherent stability favours retention of six- and five-membered rings. The above explanation simply means that amylenoxide and butylenoxide leakages (Fig. 3) are reversible owing to the same enol being formed when the ring is opened.

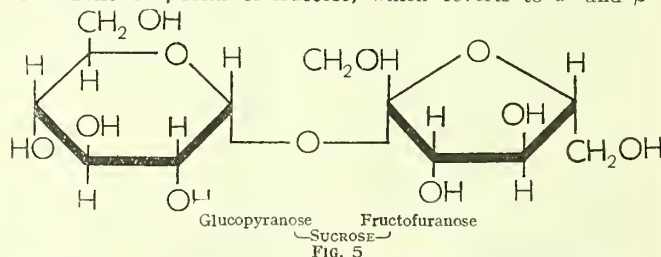
The formation of a common "enol" also explains the interconversion of glucose, mannose and fructose by aqueous alkali, as discovered by Lebry de Bruyn in 1895. The old aldehyde and keto formulas are used for the sake of simplicity in the graphic representation of the de Bruyn transformations which affect OH and H groups attached to carbon atoms 1 and 2 (Fig. 4, above).

The existence of an enol form gains confirmation in that glucose, mannose and fructose yield the same hexose diphosphate. Such consideration of a common intermediary simplifies the study of the bio-chemistry of the sugars. Thus, the hexose-phosphates of the blood (or blood sugar) may be formed, via the enol, from glucose or fructose, irrespective of either  $\alpha$ - or  $\beta$ - form or pyranose or furanose structure. Again, any yeast which ferments glucose is equally active towards fructose and mannose, which follows from hexose-diphosphate formation being a primary stage in the production of alcohol from these sugars by means of the enzyme zymase.

### Bio-chemistry of the Saccharides

The  $\beta$ -*d*-glucose formed photosynthetically is a regular assemblage with H and OH groups alternating in the *trans*

cuprous oxide. The formula for sucrose (Fig. 5) shows that the reactive aldehyde and ketonic groups are eliminated in the union of the two hexose units so that sucrose is not a reducing sugar. Dilute acids or the enzyme invertase hydrolyse sucrose into invert sugar, which is so called because it is laevorotatory,  $[\alpha]_D -20^\circ$ , as compared with dextrorotatory sucrose  $[\alpha]_D +65.5^\circ$ . The fructofuranose first yielded on hydrolysis is the labile or  $\gamma$ -form of fructose, which reverts to  $\alpha$ - and  $\beta$ -



fructopyranoses. The many exchanges which occur during the hydrolysis of sucrose are represented in Fig. 6 (top of next column).

The invert sugar which is the final product consists of a mixture in which the more stable glucopyranose and fructopyranose forms predominate. All the forms in Fig. 6 are present during hydrolysis and natural syntheses in plants apparently



depend upon selective conjugation of the correct unit. Thus the starch molecule consists of a regular chain of  $\alpha$ -glucopyranose units, whereas insulin is composed of  $\gamma$ -fructofuranose units (see below). A major difficulty in unravelling the com-

#### PRODUCTS OF INVERSION OF SUCROSE

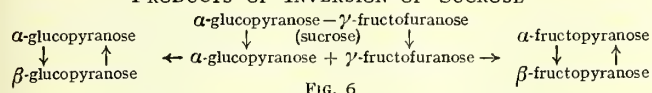


FIG. 6

plexities of photosynthesis has been the fact that laboratory conditions cannot imitate those obtaining in the cell of the living plant. Sucrose is exceptional in its constitution, remaining unaltered during its isolation from cane and beet juices.

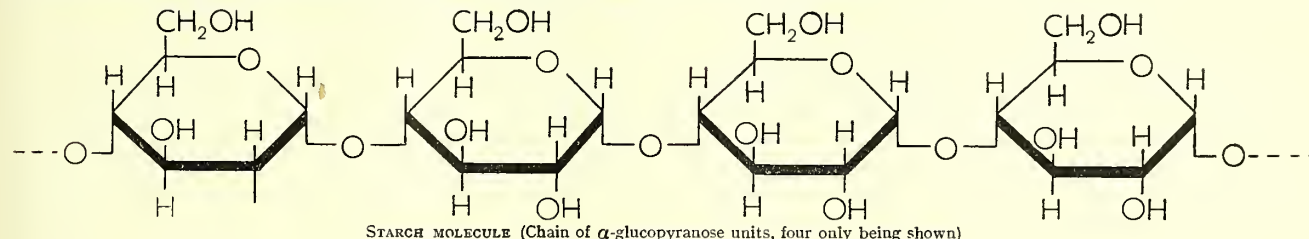
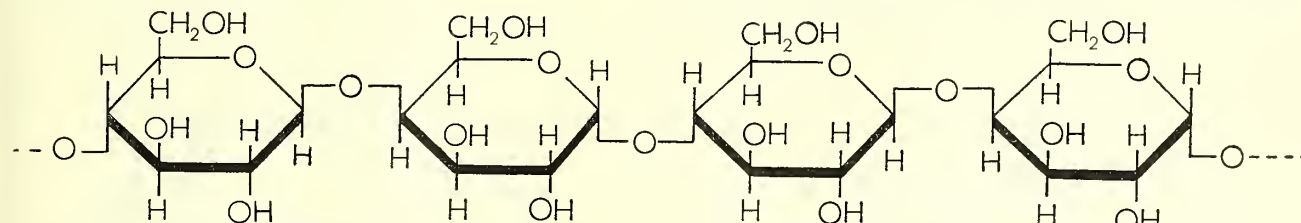


FIG. 7

Incidentally, sucrose is much sweeter to the taste than *d*-glucose but is not so sweet as invert sugar (owing to *d*-fructose being twice as sweet as *d*-glucose).



CELLULOSE MOLECULE (of  $\beta$ -glucopyranose units showing alternating linkages of the four units shown, as compared with uniform  $\alpha$ -glucosidic links in Fig. 7)

FIG. 8

DEXTROSE, or the anhydrous medicinal glucose of the British Pharmacopœia, consists of a mixture of about 33 per cent. of  $\alpha$ -glucopyranose and 66 per cent. of  $\beta$ -glucopyranose. This corresponds to the equilibrium attained during mutarotation in water. As already pointed out, the *d*-glucose of photosynthesis is  $\beta$ -glucopyranose. This is in direct contrast with starch and glycogen (storage or reserve carbohydrates in plant and animals respectively) consisting of  $\alpha$ -glucopyranose units conjoined into a regular chain with glucosidic linkage at carbon 4 (Fig. 7, above).

The starch molecule contains twenty-four to thirty glucose units as a minimum, arranged in a spiral as a result of  $\alpha$ -glucosidic linkage. It is suggested that the properties of starch paste are due to the twisted molecules becoming entangled with one another. Glycogen or animal starch possesses the same structure as vegetable starch, differing only in the units averaging twelve as a minimum per chain molecule. Cellulose is composed of  $\beta$ -glucopyranose with alternating linkages of 100 to 200 glucose units, which can be stretched into a straight chain. The layering of cell-wall structures, as in cotton hairs, apparently arises from such molecular formation *in situ*.

The facility with which the plant cell can utilise glucose units to form sucrose, starch and cellulose agrees with the theory of dynamic isomerism replacing the required form (via enol production) as fast as it is used up.

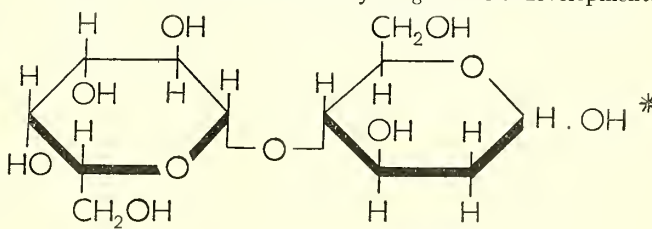
FRUCTOSE, also known as *lævulose* or *d*-fructose, occurs naturally in fruit juices along with glucose as a result of the hydrolysis of sucrose by invertase. Hence the name fruit sugar or invert sugar applied to the complex mixture (see Fig. 6). Fructose is twice as sweet as glucose, and it is readily prepared from inulin, artichokes being an economic source. Fructose behaves chemically as a keto-hexose and exists in pyranose and furanose forms. The labile form ( $\gamma$ -fructofuranose) is present in inulin, some thirty fructose units making a chain

molecule. Fructose comprises one half of the sucrose molecule (Fig. 5) and forms one third of the trisaccharides gentianose and raffinose. Fructose in either pyranose or furanose forms is interconvertible into  $\alpha$ - and  $\beta$ -isomers, but these have not been as fully investigated as the *d*-glucose dynamic isomers. Ordinary fructose,  $[\alpha]_D -133.5^\circ$ , is mainly  $\beta$ -fructopyranose, its solution mutarotating to an equilibrium at  $[\alpha]_D -92^\circ$ , approximating to that of B.P. *lævulose*.

MALTOSE or glucose-4- $\alpha$ -glucoside is obtained by the hydrolytic action of diastase on starch and represents removal of conjugated glucose units two at a time from the end of the starch molecule (Fig. 7). The crystalline  $\beta$ -maltose of commerce is a monohydrate, which on solution undergoes mutarotation into  $\alpha$ - and  $\beta$ -forms.

LACTOSE, or milk sugar, consists of glucose-4- $\beta$ -galactoside. The galactose unit differs from glucose by inversion of the H and OH groups attached to carbon atom 4. The mammary

glands are able to effect this transformation of glucose into galactose and unite one unit of each into lactose. Brain sugar or cerebrose, so called from its occurrence in cerebrosides, is now known to be galactose. This sugar is apparently required as food for the brain in the early stages of its development.



LACTOSE (\*Mutarotating H and OH groups)

FIG. 9

The importance of lactose instead of sucrose in infant feeding is obvious from the fact that conversion of glucose to galactose only takes place in the mammary gland of lactating animals. Lactose exists in  $\alpha$ - and  $\beta$ -isomerides with  $[\alpha]_D +90^\circ$  and  $[\alpha]_D +35^\circ$  respectively. The milk sugar of commerce, though known as  $\alpha$ -lactose, corresponds to the equilibrated mixture of  $\alpha$ - and  $\beta$ -lactoses with one molecule of water of crystallisation.

Investigation during 1938 indicated that plant carbohydrates (such as starch and inulin) exist in high degrees of polymerisation, but such macro-molecules are exceedingly sensitive and easily disrupted by traces of atmospheric oxygen in the solvent. Wheat starch gave a preparation with a polymerisation of 1770 (mol. wt. 286,000). This on rapid hydrolysis (with N/HCl) yielded a polymer of 600 glucose units. It is evident that living processes are bound up with the transformation of glucose units.

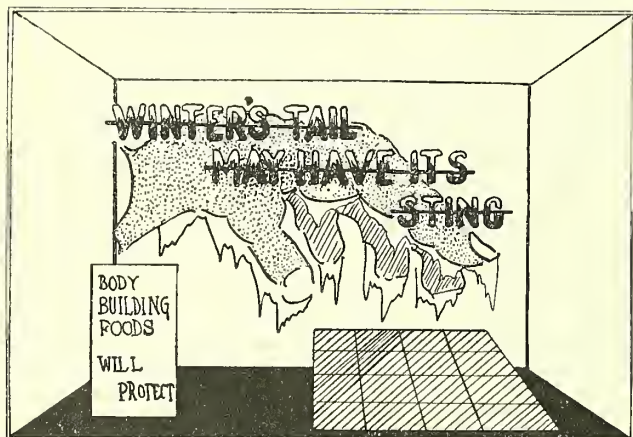
# Between-Season Displays

**M**OST chemists are glad when the quiet weeks of the late winter are well past, and many make an effort to brighten a dull season by premature displays of photographic and spring goods. This is definitely a mistake. A public recovering from 'flu and the other winter ailments which reach their peak at this period is not in the mood to be reminded that spring is around the corner. Despite longer hours of daylight, tantalising glimpses of sunlight and the presence of daffodils in florists' windows, thousands of shoppers still feel so much under the weather as to be subconsciously almost irritated by these phenomena.

## What to Show

What is the chemist to do? He should render people the service they are really in need of (though they may not realise it) by reminding them that the cod-liver oil, malt, and other protective foods are more necessary than ever at this trying period of the year. It is true that these preparations make somewhat poor material for window-display; and retailers may be permitted a small grumble. The dark glass jars, of course, are inevitable, but could not makers' packs be brighter, more indicative of the "bottled sunshine" within? Why not an orange or yellow carton? A manner in which one retailer overcame the difficulty of drab cartons was by covering the sides and back of his window space with black crépe paper and placing against this a large semi-circle of straw-

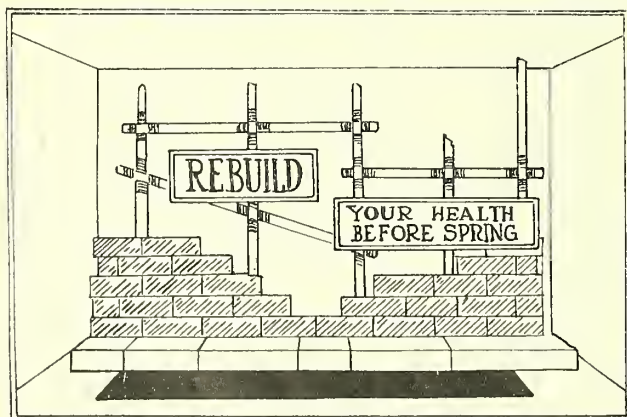
board covered with pleated orange crépe. From the circumference projected arrows, similarly covered, on the points of which were carried cartons of the different protective foods stocked. Pyramids of the same preparations were grouped on the floor. Appropriate slogans showed up effectively against the dark background: "OLD SOL IS STILL SHY. HAVE REGULAR SUNSHINE AT WILL"; "DEPRESSING DAYS ARE STILL WITH US: TAKE YOUR SUNSHINE VITAMIN REGULARLY." Another method is to concentrate on the idea of protection. People do not leave off winter woollies during March; umbrellas, mackintoshes, gum-boots are still in daily use. Why, therefore, should a protective preparation be dispensed with? Striking window-dressing ideas could be evolved along this line. Yet a third method, that could be used well into March, is to suggest that spring is certainly coming and the public must be fit and healthy in order to enjoy it properly. A campaign of this kind should, of course, be short, and should not be regarded as a mere sales device. There would be far fewer "nervy" children during summer months if their parents had continued to give cod-liver oil or a similar preparation up to the end of April, and the majority of adults would also benefit by following a similar regime until March was out. This is undeniable, and the retailer who sets himself to convey this idea to the public will find that a between-season has become, not merely a time to be filled in, but a real opportunity that if seized will result in a regular annual increase of trade.



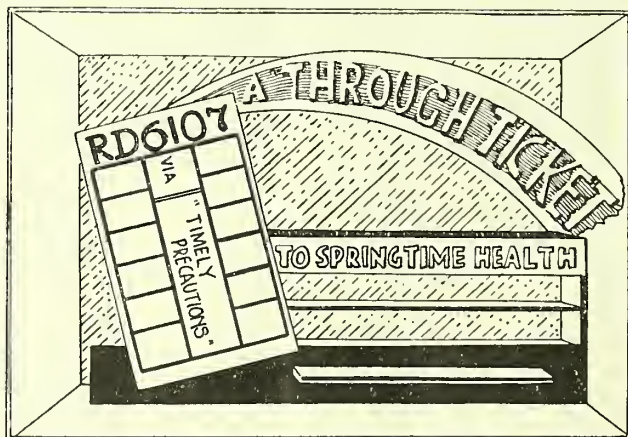
The large cut-out iced hand is mounted against the background and painted ice-blue or grey, with touches of white or silver glitter dust sprinkled on while the paint is wet. The background is grey if blue is used for the hand, or vice versa. For contrast, the floor should be in warm colours.



Irregular pieces of plywood, in the form of hills in various shades of brown and green against a pale blue background, are the main features of this display. Crêpe paper tubes of orange are pinned against the blue back, and a white cloud completes the arrangement. The lettering is applied to the back.



The brick wall can either be of real bricks, when goods are placed on top, or simply of painted plywood. Boxes form the base, and simple garden poles lashed together as scaffolding are used to carry the message-strips, which are in the form of contractors' notice boards.

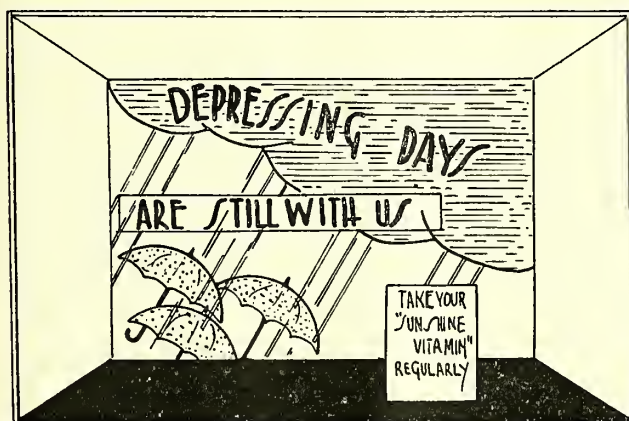


The large panel on the left is divided by tape to look like a bus ticket and goods are mounted on the spaces used for stages. The lettering is written on a wood strip and part of it is attached to a "bookcase" displayer made from simple shelving-board and painted with water paint.

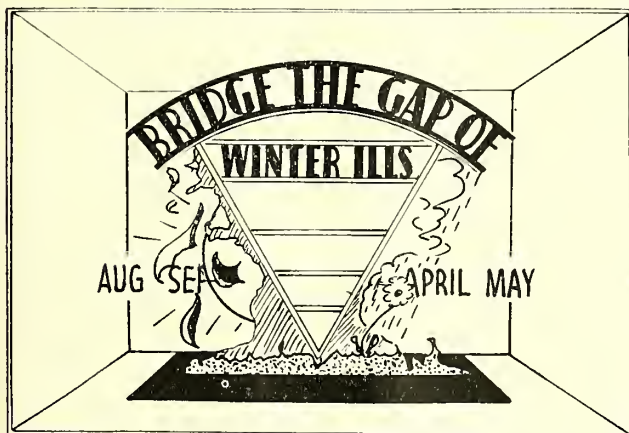




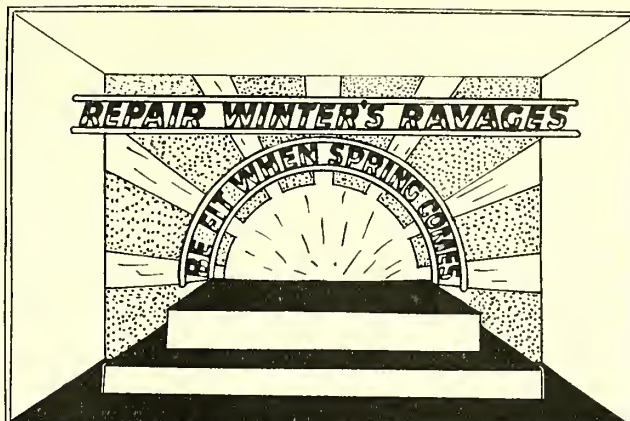
The rays from behind the sun are made from crêpe and applied first, next the orange sun, and finally the black or dark grey clouds, all against a blue background. The "rays" at the front are tapering pieces of plywood with batten underneath, coloured as the background rays and used to carry appropriate goods



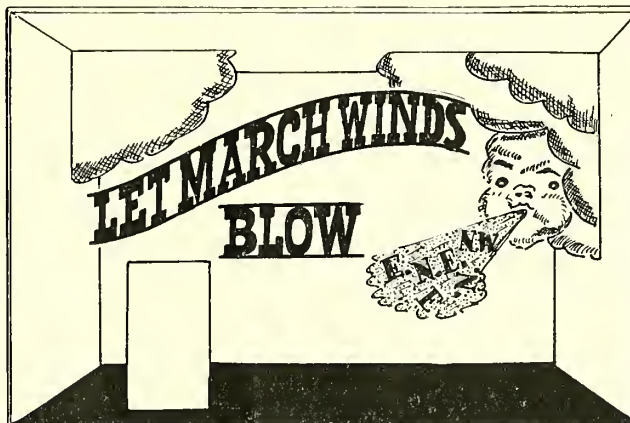
The rain is made from twin strands of white cotton stretched across the back against a grey background. The umbrellas are cut out of paper, as is the cloud, and are both in darker grey or black. The lettering brightens up the back if in either orange or red, but the bright spot should be the main showcard in attractive colours and spot-lighted from the top front of the window in either flame or orange light. The words "are still with us" are effective if lettered on a glass shelf.



Two pieces of square-edge board form the V shape, with shelves across for goods. On either side, cut from plywood, are symbolical representations of autumn and spring, with wood strip carrying the name of the appropriate months behind. The autumn side of falling leaves is in brown and black with the sun in orange, the spring side in fawns and greens with white cotton blacked at intervals to represent showers. The grass joining the two sides is in dark green. The main lettering is of cut-out letters secured to wood strips and either attached to the centre piece or slung from the window soffit.



Goods are mounted on and along the "rays." The lettering is cut out, mounted and suspended.



Two cut-outs make up this display—a simple cloud on the left in grey and white and another on the right with the face included. If the outlines of the sketch are followed carefully this should present no trouble. The lettering is treated as in the previous displays.

## "C. & D." Retail Price List

THE index of prices in drugs for February rose 0.6, chiefly owing to the advance in mercurials, the figure being 155.6 as against 155.0 in January. In surgical dressings there was no change. The principal changes are as follows:—

Cost		Drugs and Chemicals	Selling Price			
d.	per		16 oz. s. d.	4 oz. s. d.	1 oz. s. d.	1 dr. s. d.
28	oz.	Aloinum .. .. .	—	—	4 1	0 7
24	oz.	Chrysarobinum .. .. .	—	—	3 6	0 6
48	lb.	Cubebæ fructus .. .. .	—	1 9	0 6	—
60	lb.	Cubebæ fructus pulvis .. .. .	—	2 2	0 8	0 2
19	oz.	Hyd. iodid. flav. S.I.P.II. (4)	—	—	2 10	0 5
72	lb.	Hyd. oleas .. .. .S.I. (4)	—	2 7	0 9	0 2
156	lb.	Hyd. oxid. flav. .. .. .P.I. (8)	—	—	1 8	0 3
174	lb.	Hyd. oxid. rub. .. .. .P.I. (8)	—	—	1 10	0 3
129	lb.	Hyd. perchloridum S.I.P.II. (4)	—	—	1 4	0 3
150	lb.	Hyd. persulphas (alb.) .. .. .	—	5 5	1 7	0 3
144	lb.	Hyd. subchloridum .. .. .	—	—	1 6	0 3
150	lb.	Hyd. sulphuretum c. sulphure..	—	5 5	1 7	0 3
108	lb.	Hydrargyrum .. .. .	13 6	4 0	1 2	—
152	lb.	Hyd. ammoniatum .. .. .P.I. (8)	—	5 5	1 7	0 3
57	lb.	Lin. methyl salicylatis .. .. .	—	2 0	0 7	0 1
60	lb.	Lin. methyl salicylatis co. .. .. .	—	2 2	0 8	0 2
32	lb.	Ol. camphoræ ess. alb. .. .. .	—	1 2	0 4	—
21	oz.	Ol. limonis .. .. .	—	—	3 1	0 6
19	oz.	Ol. limonis (Messina) .. .. .	—	—	2 10	0 5
66	lb.	Parogenum iodi B.P.C. .. .. .	—	2 5	0 8	0 2
12	oz.	Pig. chrysarobini B.P.C. .. .. .	—	—	3 6	0 6



# A Course of Photographic Studies

(Continued from THE CHEMIST AND DRUGGIST, February 25, p. 221)

## VIII—Printing Papers

THE most frequently used positive materials are papers coated with emulsions of silver salts, having various speeds and qualities. The paper base they are coated on is specially manufactured for purity and physical strength, and prepared for coating by sizing, undercoating with baryta and afterwards calendering. The emulsions coated to-day may be divided into five main classes. Printing-out paper (P.O.P.) is an unwashed emulsion containing an excess of silver nitrate: this was used in the very early days of photography in the form of a collodion emulsion, since replaced by gelatin, and little used nowadays. Gaslight and chloro-bromide emulsions are also unwashed and contain respectively excess of soluble chloride and bromide. In the bromide or bromo-iodide papers the emulsion is washed free from such excess salts.

### Sensitometric Characteristics

Sensitometric tests of paper emulsions may be carried out in a similar way to those on negative emulsions. A subject may have, for example, a range of brightnesses of about 100:1, i.e., the amount of light from the highlights will be about a hundred times that from the deepest shadow. The range on paper is dependent on the ratio between the light reflected by the purest white and that reflected by the deepest black, and this is rarely more than 50:1. Actually in sensitometric tests the range of a paper is defined as the ratio between the exposure required to give a just perceptible density and that required to give a maximum black; and in some grades this will be about the same as the ratio of the reflections mentioned above. Study of the characteristics of printing papers shows that they have characteristic curves which vary considerably from that of a negative material and are in general further from the ideal straight-line than those of the negative materials. The curve is often of more marked S-shape and has generally only a small straight-line portion which bends rapidly from the toe and into the knee. Consequently, for any given paper and development, the object is to reproduce faithfully, by the straight line on the printing paper, those tones which are most important to the rendering of the subject: the choice of these tones will vary considerably according to the type of work. If the printing paper is exposed so that the negative gradations extend from the toe to over the knee, highlights and shadows will be flattened, to a degree which depends on the length of the scale of gradations both of the paper and of the negative, and also of the amount of this scale which is placed upon the knee or the toe of the curve. This flattening tends to eliminate the finer gradations of tone in the highlights and shadows. The scale of a paper is primarily dependent on the quality of black obtained. It is easy to determine what the development ought to be by flashing a piece of paper in fairly intense light and developing various pieces of it for various times at a given temperature. This development must not, however, be so prolonged as to give an overall fogging or increase the likelihood of developer stain. For prints, developing agents of high energy are used, and the developing formulas differ from negative developers in containing a greater concentration of the developing agent and of the activator or alkali. Further, as development times are increased, it is found, contrary to experience in negative work, that for a given type of paper contrast stays about the same and only density increases.

### Paper Contrasts and Scales

Emulsions are available in several grades of contrasts. In the negative the tonal range of the subject may be decreased or increased by altering the development time and, with it, the contrast to which the negative is developed. In general the tone range of the negative will be "gamma" times the tone range in the subject, and to obtain a faithful rendering of the subject it is necessary to preserve a final gamma of about 1.0 in the print. Unfortunately, since the paper has a characteristic curve which departs from a straight line it is often difficult to decide exactly what contrast it gives, and in addition papers may be defined either by the maximum contrast they give or by the average contrast. In general, it

is desirable to arrange that the average gamma of the negative, multiplied by the average gamma of the print, gives a product of nearly unity: in some cases it may be made as much as 1.5 when over-natural brilliance is required. To do this a soft negative of gamma 0.5 is printed, say, on a paper of gamma 2.0 (i.e., of vigorous grade), and other negatives accordingly. Any one grade of paper can cope with a definite range of tones, and this range will be smaller the greater the contrast of the paper. Some typical features of the characteristic curves of papers can be quoted. The speed and contrast of various batches may vary and the normal grade of one make of paper may correspond to the soft grade of another make. Generally speaking, the scales of the various grades of paper range from about 60:1 for the soft grade, 30:1 for the medium and 10:1 for the contrast. Further, the surface of the paper materially affects the quality of the black and therefore the tonal scale. Black matt prints give a scale varying from 15:1 to 20:1, velvet of about 25:1, and glossy glazed of up to 50:1. This explains the popularity of glossy prints. Characteristics of developers, too, will limit the range available with any given paper. The addition of bromide as a restrainer will give warm tones, flatter prints and shorter ranges: this is another argument in favour of energetic and comparatively unrestrained developers. For a given good quality negative the choice of grade of paper is determined by a knowledge of the tonal range of the negative. This can be directly measured on the densitometer. Also with a knowledge of the gamma of the negative the direct tonal range of the subject itself can be computed by simple multiplication. In gaslight papers the maximum gamma will vary from about 2.0 for the soft grade to 4.5 for the vigorous, and these will print negative ranges (measured as differences in density between highlights and shadows in the negative) from 1.75 to 1.0. The maximum slope of bromide paper ranges from the soft 1.5 to super-contrast about 4.0 and will cover negative ranges from 1.8 to 0.9. It is as well to realise what printing on higher-contrast paper means. By using a more contrasty paper, tones can be more widely separated in either highlights or shadows. One or the other will suffer as a result and this will lead to "blocked" shadows or "burnt out" highlights.

### Types of Papers and their Characteristics

Printing-out paper requires no development; it prints out in strong illumination and is simply fixed in a toning-fixing bath. It is of fairly soft gradation, therefore requiring a brilliant negative for the best results. The image tone has a yellow to orange colour when plain fixed, but sepia to purple tones are available with a hypo bath blended with gold sulphocyanide. In self-toning types small amounts of gold chloride are embodied in the emulsion, and pleasing brown tones then result merely from the use of a hypo fixing solution. Gaslight paper is so named because it can be handled in weak gaslight and its slowness adapts it for contact printing and commercial handling. It is possible now to make the emulsion so that it is not easily stained even with careless handling, although when developed the image comes up rapidly. Extremely high contrasts are possible with only slight distortion of the scale, and the wide varieties of contrasts available make it an ideal paper for commercial photo-finishing. The image appears rapidly but builds up slowly, and great increases of development over the normal will not materially affect the contrast, but simply add an overall density to the print. This makes unskilled quantity-production possible. It gives a hard, clear, brilliant result, but often lacks roundness and depth of tone, because the grey gradations of the middle tones are emphasised whereas highlight and shadow gradation is suppressed—dark grey tones tend to be rendered as black and light grey as white. It gives a blue-black tone much liked by the general public. In enlarging, the increased speed of bromo-iodide emulsions becomes valuable. These emulsions are from 100-500 times faster than gaslight emulsions, and since they are sensitive to blue and ultra-violet light and to traces of green they should be handled in an orange safelight. They are rather slower in development, give a full scale of gradation, have fair straightness but generally leave a little to be desired since



the rather long foot has to be compensated by rather too steep a middle portion. There is generally small increase of density for continued development, and this uniformity of tone is a characteristic suitable for large-scale production. Soft grades are generally used for portraiture, and the fast hardened emulsions for press and reproduction work. The image tones well with hypo-alum solutions or by the sulphide-toning process. The paper that has come to be most highly valued by serious pictorial workers is the chloro-bromide type. It combines the slower speed and fast development characteristic of the chloride emulsion with the fast exposure and slow development speed of the bromide, and therefore is generally intermediate in speed for both exposure and development between the two. The fairly long exposures needed at big enlargement are amply offset by the fact that the scale of gradation is longer and straighter, and the short foot gives much clearer and truer highlight rendering. The emulsion has a tendency to softness and the image has a general richness. Variations are possible both in exposure and development, so that difficulty may arise in matching successive prints: such adjustments make possible a range from olive-green to red-brown, and this gives to the chloro-bromide type of paper an unusual latitude.

### Processes Involving Iron Salts

The fact that ferric salts can be reduced by the action of light to form ferrous salts was pointed out by Herschel in 1842 and since then various processes of this nature have been perfected. These processes fall into two main classes, the first in which the iron salt actually forms the image, and the second in which it is a mere intermediary in producing an image in some other suitable metal. Under the first heading falls the paper for blue prints—both positive and negative—usually giving blue lines on a white ground; or, as in the case of ferro-gallic paper, purplish lines on a white ground. But apart from its most important use for tracing drawings this type of paper can be said to have little photographic significance. The most noticeable examples of the second group are the platinum and palladium papers. Platinum salts are sensitive to light, but in this process iron salts are still the active light-sensitive compound and platonic salts are used. Pure paper of the desired surface is chosen and impregnated with ferric oxalate and potassium chloroplatinite, and on exposure various salts are formed. Development is by means of potassium oxalate, and any remaining iron salts are dissolved away in dilute hydrochloric acid. Slight modifications of these baths are used for palladiotype. The print has great permanence if correctly processed and a beautiful deep black. High-temperature development or the addition of alcohol to the developer will give sepia tones.

### Processes Using Bichromated Colloids

When potassium bichromate is reduced by the action of light, with or without the presence of a reducing agent such as the silver of a photographic image, the substance formed gives a definite hardness to the gelatin. This effect has been utilised in many important control printing processes. One of the earliest of these was the carbon process. Paper or tissue is coated with a gelatin solution mixed with a pigment of the tone desired for the picture. It is sensitised with a weak solution of potassium bichromate and dried in weak artificial light. It is exposed under the negative to daylight and is about three times faster than P.O.P. Fairly accurate exposure is needed especially since further reducing action continues after the exposure is terminated. It is squeezed under water, after soaking, on to a support paper and the original tissue backing removed. Development is carried out by means of warm water, which washes away the unhardened gelatin leaving a relief image on the support. It is possible to control this development as desired. The print, since the physical action of the light is an accurately proportioned one, has a perfect scale and is permanent. Many slight modifications of the process are possible.

The only essential difference between the carbon and the Carbro process is that in the latter a bromide print is placed in contact with the carbon tissue, and in this case the silver of the image gives the reducing action and subsequent hardening. The process from then on is similar and contrast can be varied by manipulation of the sensitising solution. The advantage of Carbro is that no printing exposure is required and a print can be made from enlargements without the need of

enlarged negatives; and identical prints can be obtained by the use of the same bromide print, but in some cases with a slight loss of critical sharpness. In the oil process colourless bichromated gelatin is exposed behind the negative and a gelatin relief produced by development. Oil colour is applied thinly to the wet relief image with a special brush and will take to the surface in accordance with the exposure and the degree to which the gelatin present is hardened. Enormous control of relative tones is here possible by manual control in application of the colour. The bromoil process is similar, but employs the use of a bromide print produced in the same base as the gelatin relief. The bromide print is made on special paper and developed in amidol developer, fixed in plain hypo. The print is bleached in a special bleach bath, fixed, washed and dried. It is soaked up in cold water and inked as desired. The image can also be transferred to other supports if so desired.

### Toning

Toning is a modification of plain black and white prints so as to produce pictures with warm-black, brown, sepia, or other colours for more pleasing effects. The variety of modern printing papers would almost, except in exceptional cases, seem to make this unnecessary, but chemical toning methods are still much in favour. The processes used include sulphur, hypo-alum, single-solution, indirect and metallic processes. The most widely used are the sulphur processes, in which the image is colloidal silver sulphide: the resulting tones range from purplish brown through sepia to a bilious yellowish brown. Metallic silver may be first bleached and then converted into silver sulphide by immersion in a bath of soluble sulphide; or the sulphide may be produced by a one-bath process as the silver is oxidised. Numerous variations of these two methods are possible—notably, partial toning with some of the silver image simultaneously intensified or reduced by the use of mercury salts and manipulation of the solutions to give practically any shade from warm black to warm brown. Poly-sulphide toning baths containing liver of sulphur and varying quantities of hypo are used at 80° F. to 90° F.: they give a cheap and simple method of toning, and prints do not need rigorous washing. Brown tones may also be produced by hypo-alum toning. The hypo-alum toner is made up of hypo, alum, silver nitrate, ammonia, potassium iodide and water. This toner has a slight bleaching action, due to the presence of the iodide, so that the prints should be made slightly darker than required for the final picture. The process is controlled by the temperature of the toning bath: warmth of tone is increased by increasing the temperature of the toning bath. The time required for toning depends upon the paper, the temperature of the bath (between 110° F. and 130° F.), and the depth of tone desired; it usually requires between 15 and 30 minutes. There are several methods of speeding up the action of the hypo-alum toners; one of the commonest makes use of dipping the print into a 10 per cent. solution of sulphuric acid for half a minute before the print is immersed in the toner bath. There is only slight control possible over the resulting tone by this process. There exist indirect and direct methods of replacing silver sulphide by those of other metals whose action is often uncertain in permanence and reliability. To summarise briefly the processes of toning, all processes may be classed as either direct or indirect. In the direct process hypo and alum liberate free sulphur, which combines with the silver: the indirect process carries out substantially the same

Compounds of					Colour
Sulphur	...	...	...	...	Sepia to brown
Copper	...	...	...	...	Red to black
Iron	...	...	...	...	Blue to greenish
Gold	...	...	...	...	Gold to black
Selenium	...	...	...	...	Sepia to red
Lead	...	...	...	...	Green to red
Mercury	...	...	...	...	Brown to black
Uranium	...	...	...	...	Red to black
Vanadium	...	...	...	...	Yellow to green
Platinum	...	...	...	...	Brown to black
Molybdenum	...	...	...	...	Deep blue
Cobalt	...	...	...	...	Blue to green

process in two steps—first, the bleaching reduces the silver to silver bromide, which is then re-developed in the presence of another sulphide, which, in turn, replaces the bromide to give an image in silver sulphide. Toning ingredients and their colour effects are listed above.

(To be continued)



## New Books

Army Council *Manual of Dispensing*, 1938. 7½×4½. Pp. 377. 8s. 6d. H.M. Stationery Office. [This manual has been compiled by command of the Army Council and is presented in its present form so as to provide an official publication summarising the information required by candidates of the Royal Army Medical Corps who are undergoing a course of instruction for the army qualification of dispenser. The following subjects are included: Weights and measures, poisons (corrosive, irritant, systematic and gaseous), materia medica, official preparations of the Pharmacopœia, compounds of the metals, practical dispensing and pharmacy. Monographs have been added on the Dangerous Drugs Acts and the Pharmacy and Poisons Act, 1933. Of much interest are the sections on materia medica and practical dispensing and pharmacy, which are particularly complete and give an excellent indication of the high standard of knowledge required from candidates who seek to obtain the army qualification of dispenser. Special attention has also been given to the symptoms of poisoning and its treatment.]

Maugham, S., M.A., and Hockley, A. R., B.Sc. *Biology for Pharmaceutical Students and Others*. 8½ in. × 5½ in. Pp. 612. Illustrated. 21s. Baillière, Tindall & Cox, 7 and 8 Henrietta Street, London, W.C.2. [Botany as a subject in pharmaceutical examinations has disappeared but, as the authors point out, a considerable familiarity with technical botanical terms is essential for the study of pharmacognosy. Hence special attention has been given to meeting the needs of the student in this part of his biological training by incorporating explanations of descriptive terms likely to be met with. While this comprehensive work is designed to cover the requirements of the pharmaceutical student in biology, the fundamental principles have been covered, and this increases considerably its value also to students in other spheres. Physiology is included, since biology forms an introduction to the subject and physiology is, of course, a subject in the qualifying examination syllabus. The work is profusely and admirably illustrated.]

Bassett, H. *A Guide to Chemical Laboratory Practice for Beginners*. 7½×5. Pp. 94. 2s. 6d. Macmillan & Co., Ltd., St. Martin's Street, London, W.C.2. [Professor Bassett, University of Reading, has published this book as a series of notes which have been arranged under various headings relating both to apparatus and to operations. The object of the book is to impress upon students of science that accurate and reliable results can only be obtained by carrying out every operation with proper care. This may seem a commonplace, but it is the author's experience that it is difficult to emphasise to beginners, especially in a large practical class, of the little niceties of simple practical operations. The first chapter is devoted entirely to what may be termed the approach to practical work, and the monographs carry such titles as use of books in the laboratories, proper care of the working place, clothes, etc., care of apparatus, washing up, etc., care of the person, commonsense method and observation, learning to describe correctly what is seen, and others.]

Hofmann, Karl A., and Ulrich, R. *Anorganische Chemie*. 8½ × 5½. Pp. 796. Rm. 22. Friedrich Vieweg & Sohn, Brunswick, Germany. Eighth edition: [Since the last edition of this work was published, seven years ago, researches in inorganic chemistry have been, as the authors point out in a preface, particularly fruitful, and an endeavour has been made to keep pace with the advances made. To this end the chapters on the periodic system, chemical interaction, crystal and molecular structure and on atomic nuclei have had to be remodelled. The general scope of the work can be gathered from its arrangement. There are four parts: Introduction and relation of chemistry to physics; non-metals; metals; and miscellaneous (mainly physical chemistry). The second part is divided into sub-sections comprising several chapters each on oxygen, hydrogen, nitrogen, the halogens, etc. The third section deals with the metals in eight groups. In the fourth part the sub-sections have titles, and are concerned with explosives, organo-metallic compounds, the periodic system, chemical interaction, crystalline and molecular structure, radioactive compounds, atomic nuclei and distribution of the elements in the universe. A series of eight tables illustrates in full colour some thirty spectrum and absorption-spectrum bands.]

## Trade-Mark Applications

The figures in parentheses refer to the classes in which the marks are grouped. A list of classes and particulars as to registration are given in "The Chemist and Druggist Diary and Year-Book," 1939, p. 342.

(From "The Trade Marks Journal," February 8, 1939)

### SCHEDULE IV

- "AUSTRASYL"; for unmedicated toilet paper (16). By Austral Cabinet Co., Ltd., 15 King Street, London, S.W.1. 603,673.
- "IRIS"; for powder puffs (21). By Bernard Wise, 9 Burnham Court, Brent Street, London, N.W.4. 602,996.

(From "The Trade Marks Journal," February 15, 1939.)

### SCHEDULE III

- "CHLOROS"; for disinfectant of liquid sodium hypochlorite (2). By I.C.I. (General Chemicals), Ltd., Millbank, London, S.W.1. 571,818. (Associated.)
- "NIGROSAN"; for agricultural and veterinary chemicals, etc. (2). By British Dyestuffs Corporation, Ltd., Imperial Chemical House, Millbank, London, S.W.1. 584,696. (Associated.)
- "DAGGETT & RAMSDALL"; for cold cream, medicated skin tonic and eau de cologne (3). By Stemco, Ltd., 128 Albert Road, London, N.W.1. 581,617. (Associated.)
- "AIER MATADOEJONG," "DRALLE" on label design of weeping sea nymph (word "Dralle" disclaimed); for perfumery (48). By Georg Dralle, 16 Praesident Krahm, Hamburg, Germany. 586,718. (Associated.)

### SCHEDULE IV

- "TEGOMULS"; for emulsifiers (1). By Th. Goldschmidt A.G., 18 Salkenbergschweg, Essen-Ruhr, Germany. 601,258.
- "PERENIC"; for agricultural chemicals, etc. (1). By Imperial Chemical Industries, Ltd., Millbank, London, S.W.1. 603,714. (Associated.)
- "LORCO" for liquid soap (3). By The London Oil Refining Co., Lorco Works, Gundulf Street, London, S.E.11. 600,273. (Associated.)
- "KEMT"; for perfumery, etc., excluding soap; "WALKEMT," "TEM," "NEW-KEMT" for perfumery, etc. (3). By Drugs, Ltd., 145 Sydney Road, London, N.10. 602,818/7/B602,820/45.
- "DERMINA" in label design; for toilet cream for obesity (3). By Colloidal Chemists, Ltd., Regent House, Fitzroy Square, London, W.1. 603,493. (Associated.)
- "ATKINSONS" on label design of woman in bathroom; for perfumes, etc. (3). By J. & E. Atkinson, Ltd., 24 Old Bond Street, London, W.1. 603,199. (Associated.)
- "NICQUIT"; for perfumery, etc. (3). By R. G. Israel, 15 Widecombe Way, London, N.2. 603,818.
- "RECKLESS"; for perfumery, etc. (3). By Cussons, Sons & Co., Ltd., Kersal Vale Works, Moor Lane, Manchester. 603,872.
- "LEVONTIL" and "FAGOSTREN"; for all goods (5). By Bayer Products, Ltd., 31 Basinghall Street, London, E.C.2. 603,999/993.
- "ARKINA"; for medicines (5). By Arkina Co., Ltd., Thames House, Millbank, London, S.W.1. 603,220.
- "CYNABIL"; for medicines and pharmaceutical substances (5). By Th. Muhlethaler S.A., Route de Duiller, Nyon, Canton de Vaud, Switzerland. 603,340.
- "HAPA"; for pharmaceutical and sanitary substances, etc. (5). By Dr. Jacques G. Metadier, 69 Cromwell Road, London, S.W.7. 603,221.
- "GLEMPECS"; for medicated sweets (5). By Stotherts, Ltd., Albion Works, North Road, Atherton, Lancs. 603,699. (Associated.)
- "PLURIMIN"; for medicinal preparations, etc. "ACRIFLEX"; for ointments (5). By Allen & Hanburys, Ltd., 37 Lombard Street, London, E.C.3. 603,871/904.
- "BELAR"; for optical apparatus (9). By Optikotechna, Společnost S.R.O. Přerov, Dvofákova ulice, Přerov, Czecho-Slovakia. 600,753.
- "EXITOX" for surgical and medical instruments, etc. (10). By Natural Healing, Ltd., 17 Henrietta Street, London, W.C.2. 603,791.
- "ECONOMATIC"; for paper towels (16). By British Crepe-makers and Paper Products, Ltd., Harlequin Works, Harlequin Avenue, Brentford, Middlesex. 603,781.

### APPLICATION AMENDMENTS

- The specification of "BUTYN" in Class 3, No. 580,424, by Abbott Laboratories, Ltd., has been amended to "Chemical substances prepared for use in medicine and pharmacy, but not including medicated toilet preparations."
- The specification of "ALBIDE" in Class 5, No. 601,956, by T. J. Smith & Nephew, Ltd., has been amended to "All goods included in Class 5, but not including disinfectants, sheep dip or medicated sweetmeats."
- The specification of "TOUVIX" in Class 3, No. 582,400, by Charles Delacre, has been amended to "A pectoral syrup being a medicated preparation for human use."

(From "The Trade Marks Journal," February 22, 1939)

### SCHEDULE IV

- "DISMULGAN"; for industrial chemicals, etc. (1). By I.G. Farbenindustrie A.G., Grüneburgplatz, Frankfurt-on-Main, Germany. 604,058.
- "VIVENDA"; for perfumery, etc., excluding soap (3). By Lilian M. Gifford, 8 Brampton Road, London, N. 602,320.
- "KOLAKARBA"; for liquid disinfectant soap (3). By S. R. Manufacturing Co., Ltd., and Queens Stores Co., 66 Bridgewater Street, Liverpool, 1. 602,841.
- "VELVYCREME"; for perfumery, etc. (3). By Cussons, Sons & Co., Ltd., Kersal Vale Works, Moor Lane, Manchester. 602,947. (Associated.)
- "DOAN'S SPECIALITIES" and design of man's head and wings (word "Doan's" disclaimed); for perfumery, etc., and pharmaceutical preparations, etc. (3) (5). By Foster-McClellan Co., 37 Mortimer Street, London, W.1. 603,530/1. (Associated.)
- "NEATALIN"; for oleine (4). By the Lord Mayor, Aldermen and Burgesses of the Corporation of Bradford, The Town Hall, Bradford. 604,070.
- "EGERON"; for all goods, excluding infants' and invalids' foods (5). By C. H. Boehringer Sohn, Bingerstrasse 173, Nieder-Ingelheim A. Rhein, Germany. 601,806.



# Trade Report

Where possible scales of prices of chemicals are given for bulk down to small quantities. Prices recorded for crude drugs, essential and fixed oils and coal tar products are for fair sized wholesale quantities. Qualities of chemicals, drugs, essential and fixed oils, etc., vary, and selected brands or grades would be at higher values

## 28 Essex Street, W.C.2, March 2

THE RECENT BETTER TONE in the markets is being well maintained, and the volume of home trade business is steadily increasing. Shipment business, however, remains disappointing both as regards the export of British products and the re-export of natural commodities. In many cases, it seems, the decline in the volume of exports is due largely to the inability of the foreign buyer to send currency out of his country in payment. There is also evidence of fierce competition, particularly in manufactured goods. Business in PHARMACEUTICAL CHEMICALS continues steady and about up to recent average and is chiefly concerned with home trade orders. MERCURIALS continue unchanged and firm. Quotations for bulk quantities of EPHEDRINE HYDROCHLORIDE are easy, with little doing.

## Crude Drugs

A steady trade in these commodities is reported and, as in other markets, the bulk of the orders have been for home account. The demand from the Continent, including the Baltic countries, has been unusually quiet, and American orders have been only moderate. The general tone of the market is quite steady, and stocks of some commodities are small, with no shipment offers. The first arrivals of new crop AGAR should reach London about the middle of this month; the stocks here of old crop are comparatively small. The demand for spot supplies of CURAÇAO ALOES continues, with full prices being paid; no shipment offers. New crop BUCHU now quoted for shipment. Quiet conditions continue in CARDAMOMS, and the shipment market is inclined to be easy as quoted. Quite good sales of spot lots of CASCARA SAGRADA. Lofoten fishing results continue very good; the shipment market for Norwegian COD-LIVER OIL is dull and again quoted easier. Rather more business in ERGOT. West African GINGER shows a further small loss, with the shipment quotation now at very low figures. Sudan GUM ACACIA remains dull. The HONEY market is steady, but quiet. A fair amount of spot business reported in MATTO GROSSO IPECACUANHA; market steady. Japanese MENTHOL is steady on spot and firm forward; business fair. Spanish-Italian MERCURY is reported very firm and unchanged for shipment. The spot market for all descriptions of RHUBARB continues very firm, with supplies severely restricted; no shipment offers. RUBBER shows a further small recovery. There has been a sharp advance in Dutch CARAWAY SEED. Nearly all old crop Alexandrian hand-picked SENNA PODS have been cleared, and there is a good inquiry for new crop goods, but nothing more to hand.

## Essential Oils

Dealers report rather more business moving in these products, and the general tone is fairly steady. The Consortium quotation for new crop BERGAMOT is stated to be fully steady. Any small spot supplies of white CAMPHOR are at famine prices; no shipment offers. CASSIA remains dull. Ceylon CITRONELLA is quoted dearer for shipment; the increase appears to be due to market operations and may be only temporary. Shipment prices for Australian EUCALYPTUS are fully steady. HO (SHU) is short and dearer on spot. Sicilian new crop hand-pressed LEMON is quoted cheaper, and a fair business is reported. Shippers' prices for genuine new French Guinea ORANGE are maintained. Fair business in Japanese PEPPERMINT, and the shipment market is stated to be firm. Some cheap offers of SPEARMINT have been noted, but the quality of the oil is not known.

## Exchange Rates on London

The following is a list of the chief Continental and other exchange rates at the opening on Thursday morning:—

Centre	Quoted	Par	February 23	March 2
Amsterdam ...	Fls. to £	12·107	8·75	8·82
Berlin ...	Mks. to £	20·43	11·68	11·68
Brussels ...	Belgas to £	nominal	27·84	27·85
Copenhagen ...	Kr. to £	18·159	22·40	22·40
Lisbon ...	Esc. to £	110	110	110
Madrid ...	Ptas. to £	25·24½	nominal	nominal
Milan ...	Lire to £	92·46	80½	80½
Montreal ...	Dols. to £	4·86½	4·71	4·70½
New York ...	Dols. to £	nominal	4·68½	4·68½
Oslo ...	Kr. to £	18·159	19·90	19·90
Paris ...	Fr. to £	124·21	177	177
Prague ...	Kr. to £	164·25	136½	136½
Stockholm ...	Kr. to £	18·150	19·40	19·40
Warsaw ...	Zloty to £	43·38	24½	24½
Zurich ...	Frs. to £	25·2115	20·60	20·60

Bank rate 2 per cent.

## Pharmaceutical Chemicals, etc.

PRODUCTS in this market continue to be quoted steadily, and a fair volume of business is reported.

ACETANILIDE.—Market steady but quiet: B.P. crystals and powder quoted at 1s. 7d. to 1s. 10½d. per lb., as to quantity.

AMIDOPYRINE.—Dealers' prices continue competitive: crystals, two cwt., 9s. 4d.; one cwt., 9s. 8d.; less than one cwt., 10s. per lb., with powder 2½d. per lb. extra.

AMMONIUM ICHTHIOSULPHONATE.—Scale of prices is steady: one cwt., 1s. 6½d., in 14-lb. tins; 1s. 8d. in 1-lb. tins; 1s. 10d. in 8-oz. tins; and 2s. 1d. per lb. in 4-oz. tins.

ASPIRIN.—Makers' scales of prices continue steady at the recent reduction:—

In containers	lb.	2 lb.	4 lb.	7 lb.	14 lb.	28 lb.
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
1 lb. and under 4 lb. ...	3 3	3 18	—	—	—	—
4 lb. and under 7 lb. ...	3 2	3 0½	3 0½	—	—	—
7 lb. and under 14 lb. ...	3 1	2 11	2 11½	2 10½	—	—
14 lb. and under 28 lb. ...	3 0	2 10½	2 10½	2 9½	2 9½	—
28 lb. and under 1 cwt. ...	2 11	2 9½	2 9½	2 8½	2 8½	2 8
Not less than 1 cwt. ...	2 7½	2 6	2 5½	2 5½	2 5½	2 4½
Not less than 5 cwt. ...	2 7	2 5½	2 5½	2 4½	2 4½	2 4
Not less than 10 cwt. ...	2 6	2 4½	2 4½	2 3½	2 3½	2 3

The quotations for aspirin, powder and tablets, are subject to the following conditions:—Buyers not to resell any quantity at prices or terms below the scale for such quantity current at the time the resale is made, and, if he converts the aspirin into tablets, not to sell any quantity of tablets at prices or terms below the scale for such quantity current at the time when he sells the tablets.

BORIC ACID (B.P.).—Makers' prices continue steady: granulated, £36 10s.; crystals, £37 10s.; powder, £38 10s.; extra fine powder, £40 10s. per ton, in 1-cwt. bags, carriage paid to buyers' works on 1-ton minimum. Commercial quality, £8 per ton cheaper for all descriptions.

BORAX (B.P.).—Makers' prices steady: granulated, £24; crystals, £25; powdered, £25 10s.; extra fine powder, £26 per ton, in one-cwt. bags, carriage paid buyers' works for minimum 1-ton lots. Extra for smaller quantities. Commercial quality, £8 per ton less for all descriptions.

BROMIDES.—Makers' scales of prices steady. POTASSIUM, B.P., five cwt., 1s. 8d.; one cwt., 1s. 9d.; 28 lb., 2s. per lb. SODIUM, B.P., five cwt., 1s. 10d.; one cwt., 1s. 11d.; 28 lb., 2s. 2d. per lb. AMMONIUM, B.P., five cwt., 1s. 11d.; one cwt., 2s.; 28 lb., 2s. 3d. per lb. net. Resale clause applies. 28-lb. parcels and one-cwt. cases free. Smaller quantities than 28 lb. at higher prices. Export quotations are maintained as follows: POTASSIUM, B.P., five cwt., 1s. 4d.; one cwt., 1s. 4½d. SODIUM, B.P., five cwt., 1s. 5d.; one cwt., 1s. 5½d. AMMONIUM, B.P., five cwt., 1s. 6d.; one cwt., 1s. 7d. per lb., f.o.b.

BUTYL CHLORAL HYDRATE.—Business slow: spot, 14 lb., 8s.; 7 lb., 8s. 3d.; 1 lb., 8s. 6d. per lb., in 1-lb. bottles.

CAFFEINE.—The scale of prices for Continental materials continues steady, as follows: PURE: bricks, less than 56 lb., 9s. 9½d.; 56 lb., 9s. 7½d.; one cwt., 9s. 5½d. per lb. Powder, less than 56 lb., 10s. 1d.; 56 lb., 9s. 11d.; one cwt., 9s. 9d. per lb. Anhydrous powder, less than 56 lb., 10s. 6d.; 56 lb., 10s. 4d.; one cwt., 10s. 2d. per lb. CITRATE: less than 56 lb., 6s. 6½d.; 56 lb., 6s. 5½d.; one cwt., 6s. 4½d. per lb. delivered United Kingdom, duty paid. Cases and 5-lb. tins free.

CHLORAL HYDRATE.—Steady at makers' prices; duty-paid crystals, in 14-lb. free containers, five cwt., 3s. 2d.; one cwt., 3s. 3d.; 28 lb., 3s. 4d. per lb.; 28-lb. jars one penny per lb. extra.

CITRIC ACID (B.P. CRYSTALS).—Values are steady: British material quoted at 1s. 6½d. per lb., less 5 per cent. discount, nominal and without engagement. Dealers' prices for imported material are competitive.

CREAM OF TARTAR.—Market is steady: British material, 99 to 100 per cent., 92s. per cwt., less 2½ per cent. discount. Dealers' prices for foreign material competitive.

CREOSOTE (B.P.).—Quiet: bulk quantities, in 25-kilo demijohns, 1s. 6d.; small parcels, 1s. 7½d. up to 2s. per lb., ex store.

EPHEDRINE.—Business rather slow and market easy for bulk quantities as quoted: Hydrochloride, B.P., about 6s. per oz. for minimum 1,000-oz. lots; small quantities, up to 7s. Pure alkaloid is quoted from 7s. 9d. to 8s. 3d. per oz., as to quantity.

GALLIC ACID.—Market is firm: spot, one cwt., 3s.; 56 lb., 3s. 1d.; smaller parcels, up to 3s. 6d. per lb.



**IODIDES.**—Makers' prices for salts unchanged. **POTASSIUM, B.P.**—Not less than 1 cwt., 5s. 3d.; not less than 28 lb., 5s. 6d.; not less than 14 lb., 5s. 9d.; not less than 7 lb., 6s. 3d.; not less than 4 lb., 6s. 9d.; smaller quantities, 7s. 3d. per lb. **SODIUM, B.P.**—Not less than 7 lb., 7s. 4d.; not less than 4 lb., 8s.; smaller quantities, 8s. 10d. per lb. **IODINE, B.P., RESUBLIMED.**—Not less than 1 cwt., 5s. 9d.; not less than 28 lb., 6s.; not less than 14 lb., 6s. 3d.; not less than 7 lb., 6s. 9d.; not less than 4 lb., 7s. 5d.; smaller quantities, 8s. 2d. per lb. **IODOFORM, B.P., CRYST., PRECIP. or POWDER.**—Not less than 28 lb., 8s. 3d.; not less than 14 lb., 8s. 7d.; not less than 7 lb., 9s. 3d.; not less than 4 lb., 10s. 1d.; smaller quantities, 10s. 11d. per lb. Contracts for 1 cwt. and upwards (assorted if required), with fall clause, for delivery as required during four months, 28-lb. tins and 1-cwt. cases free. All bottles are charged, but will be credited in full if returned carriage paid, in good condition, within three months. Carriage paid on any quantity. It is a condition of sale that buyers undertake not to resell any quantity of the above products at prices below the scale for any such quantity current at the time the sale is made.

**MERCURIALS.**—Makers' prices continue firm at the advance on the basis of sixpence on account of the recent increases in the cost of the metal. The new scales are as follows:—

	Less than 28 lb.	Not less than 28 lb.	Not less than 112 lb.
Ammoniated Lump B.P. (White Precip.) ...	s. d. 6 10	s. d. 6 6	s. d. 6 5
" Powder B.P. ...	7 0	6 8	6 7
Bichloride Lump B.P. (Corros. Sub.) ...	6 1	5 9	5 8
" Powder B.P. ...	5 9	5 5	5 4
Chloride B.P. (Calomel) ...	6 10	6 6	6 5
Red Oxide Cryst. B.P.C. (Red Precip.) ...	7 11	7 7	7 6
" Levig. B.P.C. ...	7 5	7 1	7 0
Yellow Oxide B.P. ...	7 3	6 11	6 10
Persulphate White ...	7 0	6 8	6 7
Sulphide Black (Hyd. Sulph. cum. Sulph. 50%) ...	6 11	6 7	6 6

Net. Strictly without engagement. Usual terms. Special prices for larger quantities and for contracts. The previous market alteration was on December 1, 1938.

**METHYL SALICYLATE.**—Business moderate: spot, ten cwt., 1s. 1½d.; five cwt., 1s. 2d.; one cwt., 1s. 2½d.; less than one cwt., 1s. 3d.; small quantities, in bottles, up to 2s. per lb.

**PHENACETIN.**—Makers' prices are steady: crystals or powder, bulk quantities, from 2s. 6d.; smaller parcels, 2s. 7d. up to 3s. per lb., as to quantity.

**PHENAZONE.**—Unsteady on a slow market: crystals, five cwt., 6s. 9½d.; two cwt., 7s.; one cwt., 7s. 3d.; and less, up to 7s. 6d. per lb., with powder 2½d. per lb. extra.

**PHOTOGRAPHIC CHEMICALS.**—Home makers' prices are as follows: **AMIDOL.**—28 lb., 8s.; 14 lb., 8s. 9d. net; 7 lb., 9s. 6d., in free 7-lb. tins; under 7 lb., 12s. per lb., in free 1-lb. bottles, less 2½ per cent., monthly terms. **CHLORQUINOL.**—1-lb. bottles, 21s. per lb. **GLYCIN.**—7 lb., 10s. 6d.; 1-lb. bottles, 13s. 6d. per lb. **HYDROQUINONE.**—56 lb., 4s. 10½d.; 28 lb., 5s.; 14 lb., 5s. 3d.; 7 lb., 5s. 6d.; in 1-lb. bottles, 6s. 6d. per lb. **METOL.**—28 lb., 9s. 6d.; 14 lb., 9s. 9d. net; 7 lb., 10s. 6d., tins free; 3 lb., 12s., bottles free; 1-lb. bottles, 12s. 6d. per lb., bottles free, less 2½ per cent., monthly terms. **ALUM (PHOTOGRAPHIC QUALITY).**—1 cwt., 21s. per cwt.; 28 lb. for 6s. **GOLD CHLORIDE.**—15-grain tubes, 45s. per doz. **MAGNESIUM POWDER.**—10s. per lb. **PARAMIDOPHENOL HYDROCHLOR.**—8s. 6d. per lb., bottles free. **POTASSIUM FERRICYANIDE.**—14 lb., 2s. 2d.; 7 lb., 2s. 4d.; 1 lb., 2s. 6d. per lb. **POTASSIUM METABISULPHITE.**—One cwt., 8d.; 28 lb., 9d.; 14 lb., 10d.; 7 lb., 1s. per lb. **PYROGALLIC ACID, CRYST.**—One cwt., 7s. 9d.; 56 lb., 8s.; 28 lb., 8s. 3d. net; 14 lb., 9s. 9d.; less than 7 lb., 10s. 3d. per lb., less 2½ per cent., monthly account. Resale in small packages: 1-oz. bottles, 2s.; 4-oz., 5s. 3d.; 8-oz., 9s.; 16-oz. bottles, 16s. 1½d. each, less 3½ per cent. to the trade. **RESUBLIMED.**—1-oz. bottle, 2s. 6d.; 4-oz., 6s. 6d.; 8-oz., 11s. 3d.; 16-oz. bottles, 20s. 3d. each, less 3½ per cent. to the trade. **SODIUM CARBONATE, RECRYST.**—5 cwt., 12s. 6d. per cwt.; 1 cwt., 15s. 6d. per cwt.; 56 lb. for 11s. 6d.; 28 lb. for 6s. **SODIUM HYPOSULPHITE, CUBES, CRYST.**—5 cwt., 17s.; 1 cwt., 19s. 6d. per cwt.; 56 lb. for 11s. 6d.; 28 lb. for 6s. **SODIUM SULPHIDE (PURE).**—7 lb., 1s. 9d.; 1 lb., 2s. per lb., bottles and jars free. **SODIUM SULPHITE, RECRYST.**—One cwt., 21s. 6d. per cwt.; 56 lb. for 13s. 6d.; 28 lb. for 7s.

**POTASSIUM PERMANGANATE (B.P.).**—British makers' scale of prices for home trade is as follows: Not less than one cwt., 10½d.; not less than three cwt., 10d., in drums; not less than 5 cwt., 9½d. in 1-cwt. drums and 9½d. in 5-cwt. drums, net, delivered buyer's station, drums free. Technical or commercial quality, one cwt., 96s.; three cwt., 91s. 6d.; five cwt., 89s.; one ton, 86s. 6d. per cwt., in 1-cwt. drums.

**POTASSIUM SULPHOGUAIACOLATE.**—Remains dull: spot quotations steady at about 6s. 2d. per lb., as to quantity.

**QUININE SALTS.**—Convention prices continue steady: Sulphate, 2s. 3d.; bisulphate, 2s. 3d.; ethyl carbonate, 2s. 11d.; salicylate, 2s. 11½d.; hydrochloride, 2s. 10d.; dihydrochloride, 3s. 1½d.; hydrobromide, 2s. 10d.; dihydrobromide, 3s. 1½d.; valerianate, 3s. 9½d.; phosphate, 3s. 5½d.; hydrophosphate, 4s. 1½d.; alkaloid, 3s. 1½d. per oz., 100-oz. tins free, carriage paid on bulk quantities.

**SALICYLIC ACID (B.P.).**—Quotations steady at makers' prices: five cwt., 1s. 7d.; one cwt., 1s. 7½d.; 28 lb., 1s. 10d.; 14 lb., 1s. 11d.; 7 lb., 2s. 0½d.; 4 lb., 2s. 2½d. per lb.

**SODIUM SALICYLATE (B.P.).**—Average business in limited quantities: makers' prices unchanged: home trade, crystals or powder, five cwt., 1s. 5½d.; one cwt., 1s. 6d.; 28 lb., 1s. 9d.; 14 lb., 1s. 10½d.; 7 lb., 1s. 11½d.; 1 lb., 2s. 4d. per lb.

**TARTARIC ACID (B.P. CRYSTALS).**—Market is steady: British makers quote at 1s. 1½d. per lb., less 5 per cent. discount, dealers offering foreign materials at competitive prices.

**TERPINEOL.**—Quotations are steady at current low values: ten cwt., 11d.; five cwt., 11½d.; one cwt., 1s.; smaller quantities, up to 1s. 4½d. per lb.

**THEOBROMINE.**—The scales of prices for Continental material continue steady, as follows: Pure, less than 56 lb., 8s. 8½d.; 56 lb., 8s. 6½d.; one cwt., 8s. 4½d. per lb. Soda cal., less than 56 lb., 6s. 10d.; 56 lb., 6s. 9d.; one cwt., 6s. 8d. per lb., delivered United Kingdom, duty paid. Cases and 5-lb. tins free. Smaller packings extra.

**THYMOL.**—Synthetic, fine white, one cwt., 6s.; 56 lb., 6s. 4d.; 28 lb., 6s. 9d.; less than 28 lb., 7s. 6d. per lb., tins extra; ex ajowan seed, one cwt., 8s. 5d.; 56 lb., 8s. 10½d.; 28 lb., 9s. 5d.; 14 lb., 10s. 6d. per lb.

**VANILLIN.**—Convention prices for home trade are steady: ex clove oil or guaiacol, five cwt., 11s.; one cwt., 11s. 1½d.; 56 lb., 11s. 3d.; smaller quantities, 11s. 6d. per lb.

### Crude Drugs, etc.

**AGAR.**—A moderate business passing with spot and forward quotations maintained: spot, Kobe, No. 1, 3s. 8d. to 3s. 9d.; No. 2, 3s. 7d.; and in very short supply. Yokohama, No. 1, 3s. 5d. per lb. Japanese shippers quote Kobe, No. 1, 3s. 4d. to 3s. 5d.; No. 2, 3s. 2d. to 3s. 3d., and Yokohama No. 1, 3s. per lb., c.i.f. Re-sellers: January-February, No. 1, 3s. 3d.; for February-March, 3s. 2½d. per lb., c.i.f.

**ALKANET ROOT.**—Dealers are quoting spot supplies at about 45s. per cwt., ex store.

**ALOES.**—The demand for Curaçao continues quite good and full prices are being paid; no shipment offers: Cape, spot, in boxes, 47s. 6d.; shipment, 43s. per cwt., c.i.f. Curaçao, spot, 180s. up to 190s. for livery.

**ANTIMONY.**—Market is steady at the better figures: Chinese, crude, spot, £37; shipment, March-April, £30, c.i.f. English regulus, £71 per ton, ex store.

**ARECA NUTS.**—Exports from Ceylon during January-November, 1938, totalled 73,600 cwt., valued at Rs. 902,000, compared with 56,600 cwt., valued at Rs. 698,000 in the corresponding eleven months of 1937.

**BALSAMS.**—Steady but in small demand: *Tolu*, 1s. 9d.; *Canada*, 3s. 1½d.; shipment, 2s. 10½d.; *Copaiba*, 1s. 8d.; *Perru*, 4s. per lb., spot.

**BELLADONNA.**—Supplies on spot of root continue very scarce and up to 72s. 6d. per cwt. is now quoted.

**BUCHU.**—Spot demand for last season's leaves is quiet: spot, rounds, 1s. 2d. to 1s. 3½d. per lb., ex store; shipment, March, 1s. 1½d. to 1s. 2d. per lb., c.i.f., for bulk quantities.

**CAMPHOR.**—Rather more inquiry, values steady: Japanese monopoly BB brand, £7 10s. per 100 lb.; Japanese, natural, spot, tablets, 2s. 6d.; powder, 2s. 3d.; slabs, 2s. 2½d. per lb., ex store; shipment, tablets, 2s. 2d.; powder, 1s. 10½d.; slabs, 1s. 10½d. per lb., c.i.f. English refined flowers, one cwt., 3s. 1d.; 28 lb., 3s. 2d.; small lots, 3s. 3d. per lb. Transparent tablets, 4 oz., 8 oz. and 16 oz., 3s. 4d.; 1 oz. and 2 oz., 3s. 5d.; ½ oz., ½ oz. and ¼ oz., 3s. 6d.

**CANTHARIDES.**—Spot sales in small quantities: Russian, 4s. 3d. to 4s. 4½d.; Chinese, spot, 1s. 11d. per lb., as to quantity.

**CARDAMOMS.**—Interest in these products is quiet at the moment; the shipment market shows no further decline, but near bids might be considered: shipment, Aleppy greens, f.a.q. the season, 2s. 4d., c.i.f.; Aleppy seed, 3s. 4d., c.i.f.; Mangalore seed, 3s., c.i.f.; spot, Aleppy seed, 3s. 9d.; Mangalore seed, 3s. 9d. per lb. Aleppy greens, spot, 2s. 7d., ex store.

**CASCARA SAGRADA.**—Quite a good spot demand reported by some spot holders, with prices fully maintained: spot, 1938 bark, 52s. 6d.; 1937 bark, 57s. 6d.; 1936 bark, up to 65s. per cwt., ex store, duty paid. No shipment offers from the source.

**CLOVES.**—Rather quiet, values steady: Zanzibar, spot, 9d.; shipment, March-May, 8d. per lb., c.i.f. Madagascar, in bond, 8d.; shipment, March-May, 7½d. per lb., c.i.f.

The landings of Zanzibar in London during the week ended February 25 were 187 and the deliveries 237 leaving a stock of 398. From January 1 to date the landings of Zanzibar have been 403 and the deliveries 285. Landings of Madagascar for the week ended February 25 were 13, and the deliveries 30, leaving a stock of 177. From January 1 to date the landings of Madagascar have been 165 and the deliveries 431.

**COCOA BUTTER.**—Limited business reported: prime English, 8½d. to 10d. per lb. Foreign, 7½d. to 9d. per lb., as to quantity and quality.



**COCONUT (DESICCATED).**—Market has been rather quiet; spot, fine, 17s. 3d.; medium, 17s. 6d. per cwt., shipment, halves, February-March, 16s. 6d. per cwt., c.i.f.

Exports from Ceylon during January-November, 1938, totalled 552,000 cwt., valued at Rupees 4,072,000, compared with 538,000 cwt., valued at Rupees 6,313,000 in the corresponding eleven months of 1937.

**COD-LIVER OIL.**—Bergen reports Lofoten fishing continues under favourable conditions. Results to February 25: 38,461 tons of cod and 19,194 hectol of oil, compared with 22,359 tons of cod and 9,581 hectol. of oil on the same date in 1938, and 31,946 tons of cod and 17,117 hectol. of oil in 1937. Shipment market is still dull and quotations are easier: Finest Lofoten steam-refined non-freezing medicinal oil, about 80s. per barrel, c.i.f. London. Small lots, on spot, about 128s. per barrel, ex store, duty paid. British finest medicinal oil, 115s. per 25-gallon drum, delivered U.K., with rebates for 25 or more drums.

**DERRIS ROOT.**—Market is still generally quiet: 5 to 6 per cent. rotenone and 17 per cent. ether extract, 9d. duty paid, and 8 per cent. rotenone, 11d. per lb. duty paid; shipment, 17 per cent. ether extract, 38s., c.i.f., and 4 per cent. rotenone, 62s. 6d. per cwt., c.i.f.

**ERGOT.**—Rather more spot business recorded and current quotations are steadier. Portuguese, 4s. to 4s. 3d.; Polish, 3s. 6d. paid for slightly wormy and 3s. 7d. to 3s. 8d. wanted for sound.

**GINGER.**—West African continues to be quoted at cheap prices: West African, spot, 19s.; for arrival, 17s. per cwt., c.i.f. Jamaican, spot, bold, in barrels, 65s. to 75s.; medium bold, in bags, 47s.; small grinding, in bags, about 40s. per cwt., c.i.f.

**GUM ACACIA.**—Market remains quiet: Kordofan, cleaned sorts, spot, about 40s.; shipment, 36s. 6d. per cwt., c.i.f.

**HENBANE.**—Occasional business at steady prices: small spot supplies at about 65s. per cwt., ex store.

**HENNA.**—Not very much moving. Egyptian, brown, 30s.; good green, new crop, 32s. 6d. per cwt., c.i.f.

**HONEY.**—The steadier conditions recently noted in this market are maintained; business moderate: spot, dark liquid, manufacturing, 31s. up to 40s. for pale set; Californian, white clover, 47s. 6d., duty paid. Canadian, 43s. to 46s. per cwt. Small lots of all descriptions at higher prices.

**HYDRASTIS.**—This market remains dull: U.S.P., spot, 12s. 6d., untested; shipment, 12s. 3d. per lb., c.i.f. High test root, in small supply, up to 14s. 3d. per lb., ex store.

**IPCACUANHA.**—Rather more business moving on spot, market steady: Matto Grosso, B.P., spot, 6s. 9d. to 7s., as to test; shipment, 6s. 6d. per lb., c.i.f., and slightly less might be accepted. Cartagena, spot, 5s. per lb.

**IRISH MOSS.**—Market is dull: about 45s. to 60s. per cwt. for small parcels of the best qualities.

**JALAP.**—A parcel testing about 8 per cent. is available from 5d. to 6d., and root of about 7.6 per cent. from 4½d. to 5½d. per lb., as to quantity. High test root is short and there are no offers for shipments of this quality.

**MENTHOL.**—There has been a steady demand for Japanese and Chinese goods. K/S brands, 12s. 6d. to 12s. 9d.; afloat, 11s., c.i.f. Japanese shippers' quotations for January-March have been few and at over 11s. c.i.f. Market sellers at 10s. 9d., c.i.f. Chinese, spot, 11s. 9d.; French, 11s. 6d. per lb.

**MERCURY.**—Spanish-Italian metal is very firm at the recent advances at 77 dollars per bottle, f.o.b. Continent; spot, £16 10s. per bottle, ex store.

**OPIMUM.**—Some business at steady prices: Turkish, 13 per cent., 1s. 2d.; Bulgarian, 15 per cent., 1s. 2d. in original cases; Iranian, 12 per cent., 1s. 1d. per unit, landed and duty paid.

**ORANGE PEEL.**—A supply of bitter ribbons on spot is held for 9d. per lb., ex store.

**PAPAIN.**—Exports from Ceylon during January-November 1938 totalled 154,000 lb., valued at rupees 395,000, compared with 177,000 lb., valued at rupees 373,000 in the corresponding eleven months of 1937.

**PEPPER.**—Market continues steady, moderate business: Lampong, in bond, 2½d.; shipment, March-May, 2½d.; August-October, 2½d., c.i.f. Tellicherry, spot, 4d.; shipment, March-April, 32s., c.i.f. Aleppy, spot, 3½d.; shipment, March-April, 32s. 6d., c.i.f. White Muntok, in bond, 3½d.; shipment, March-May, 3½d., c.i.f. London Terminal Market: Black, March, 2½d.; May, 2½d.; July, 2½d.; White, March, 3½d.; May, 3½d.; July, 3½d. per lb.

**PIMENTO.**—Steady, but remains quiet: spot, 8d. per lb.; shipment, March-May, 69s. per cwt., c.i.f.

**RHUBARB.**—The spot market continues very firm owing to the short supplies, composed chiefly of poorish quality. One lot of Shensi offered from the source last week now reported sold, but not to this market; no further offers of any description: spot, rough round, 2s. 1d. up to 2s. 4d. Shensi, small to medium, in the region of 5s. per lb., ex store.

**RUBBER.**—Values show a further small recovery; market steady; business moderate: standard ribbed smoked sheet, spot, 8½d.; March,

8½d.; April, 8½d.; May, 8½d.; June, 8½d.; July-September, 8½d.; October-December, 8½d. per lb.

**SEEDS.**—**ANISE.**—Spot, duty paid, Spanish, 77s. 6d.; Bulgarian, 43s. 6d. **CANARY.**—Market quiet. The latest prices quoted, spot, duty paid, are: Mazagan, 15s. 3d.; Morocco, 14s. 3d.; Turkish, 13s.; Plate, 13s. 6d.; Spanish, 25s. to 36s. **CARAWAY.**—Market firm and rising. Owing to the reports from Holland that the new crop has been badly damaged by frosts, the market has jumped to 36s. 6d., f.o.b. Holland; on spot, 39s. is quoted, duty paid. This market started advancing towards the end of last week. **CORIANDER.**—Morocco, spot, 17s. 6d., duty paid; and for shipment 14s. 9d. to 15s., c.i.f., quoted. **CUMIN.**—Spot, Malta is 50s., duty free. Cable from Malta states that the crop is now exhausted. Morocco for shipment is quoted at 41s., c.i.f. **FENUGREEK.**—Spot, Indian, 13s. 6d.; Morocco, 13s., duty paid. **FENNEL.**—Spot, Indian, 21s. to 22s. 6d.; Iran, 22s. 6d., in bond. **DILL.**—Indian, 11 per cent., on spot, 18s. 6d. **MUSTARD.**—English, 20s. 6d. to 31s. 6d., according to quality.

**SENEGA.**—Market has been very quiet, with the spot value unchanged at about 2s. 9d. per lb., ex store. No shipment offers.

**SENNA.**—Practically all the old Alexandrian hand-picked pods on spot have been cleared and no further new crop has yet arrived. There is a good inquiry, and the first arrivals will be quickly cleared at good prices: Tinnevely leaves: supplies of good green quality getting scarce: fair No. 1 offered on spot at 6½d.; No. 2 at 4d.; No. 3 at 2½d.; No. 4 at 2½d. per lb. Tinnevely hand-picked pods: pale selected available at 5d. to 6d. per lb.; darker grades at 3½d. to 4d. per lb. Hand-picked Alexandrian pods: only poor selection available of ordinary inferior grades offering at 2s. 3d. down to 1s. per lb. Manufacturing quality Alexandrian pods in better demand owing to scarcity of Tinnevely variety: quotations range from 2½d. to 4½d. per lb., according to quality.

**TRAGACANTH.**—Rather quiet this week, with the lower grades of gum valued at £8 to £12 receiving some inquiry: finest selected, white ribbon, £60; No. 1, white, £55 to £57 10s.; No. 2, white, £50 to £53; No. 3, white, £35 to £42 10s.; amber leaf, £32; cleaned amber sorts, £16; brown to amber leaf, £11 10s.; red leaf, £9 to £10; hogg, £6 to £7 per cwt., ex store.

**TURMERIC.**—Quotations are unchanged, business quiet: Madras finger or Rajapore, new crop, March, 28s.; April-May, 26s. 6d. per cwt., c.i.f. Madras finger, spot, 32s. per cwt., ex store.

**WAXES.**—**BEE'S.**—Spot business of small importance; shipment market steady, with only a few offers being made: Dar-es-Salaam, spot, 100s.; shipment, 96s., c.i.f. Benguella, 90s., in bond; shipment, 84s. 6d., c.i.f. Conakry, 90s., in bond; shipment, 84s. 6d., c.i.f. Japanese, spot, 60s., duty paid; shipment, March-April, 52s. per cwt., c.i.f. Madagascar, f.d.e., 92s. 6d., duty paid; shipment, new crop, 77s. 6d., c.i.f. **CARNAUBA.**—Remains rather quiet, values steady: fatty grey, spot, 145s.; afloat, 140s.; shipment, March-April, 140s., c.i.f. Chalky grey, spot, 143s.; shipment, March-April, 135s., c.i.f. Primeira, spot, good quality, 185s.; shipment, March-April, 176s.; Mediana, spot, 177s. 6d.; shipment, 172s. 6d. per cwt., c.i.f.

### Essential and Expressed Oils, etc.

**INQUIRY** has been fairly good this week, and the volume of business transacted well up to recent average. Sicilian hand-pressed lemon is quoted rather cheaper and is attracting attention.

**ALMOND.**—Fair amount of small business reported: English-made, cwt. lots, 2s. 4½d.; smaller parcels, up to 3s. per lb.; foreign, cwt. lots, 2s. 4½d.; smaller parcels, up to 3s. per lb. French bitter, 6s. to 6s. 1½d. per lb.

**ANISE (STAR).**—The spot market continues to attract but a limited demand despite the comparatively cheap prices quoted by spot holders; shipment offers are firm: spot, leads, nominal; tins, about 3s. 3d.; drums, 3s. 2d. per lb., ex store; shipment, tins, 2s. 11d. per lb., c.i.f.

**AVOCADO PEAR.**—Dealers' prices for the Californian oil are steady at 45s. to 52s. 6d. per gallon, as to quantity.

**BAY.**—Quantities slightly cheaper: cases, 4s. to 5s. per lb., as to quality.

**BERGAMOT.**—The shipment market for new crop oil, prompt dispatch, is reported to be fully steady at 15s. per lb., c.i.f., for Consortium oil. Spot prices for genuine oil are in the region of 15s. 6d., with blended oils at cheaper figures. A fair business in limited quantities is reported.

**BOIS DE ROSE.**—Not much business, market steady: drums, 5s. 9d., with smaller quantities, re-packed, up to 6s. 3d. per lb., ex store; shipment, 5s. 6d., c.i.f., minimum three drums.

**CAJUPUT.**—Fair amount of small business continues: B.P., 1s. 11d. to 2s. 4d. per lb., as to quantity, spot.

**CANANGA.**—Business continues on a minor scale, with the market competitive: spot, 4s. 4½d. to 4s. 9d. per lb., according to quantity and packing; shipment, about 4s. 1½d. per lb., c.i.f.

**CARAWAY.**—Dutch oil is selling on spot, with some other oils at rather cheaper figures: Dutch rectified, 7s. 3d. to 7s. 9d.; crude, 6s. 9d. to 7s. 3d. per lb., as to quantity, landed and duty paid.

**CASSIA.**—Market remains dull, with spot holders' prices about maintained; shipment firm: spot, leads at about 3s. 3½d. and drums at 3s. 2½d. Shipment offers of leads from China at 3s. 4d., c.i.f.



**CASTOR.**—Market quiet. Pharmaceutical, 39s. 6d. per cwt., in barrels, ex store, London. Hull, 2s. per cwt. less. Small quantities packed in cases, 4s. 6d. per cwt. extra.

**CINNAMON LEAF.**—A fair amount of small business continues on spot: Ceylon oil, repacked in limited quantities, about 2s. 6d. to 2s. 9d. per lb., as to quantity.

**CITRONELLA.**—The shipment quotation for Ceylon has advanced, but this improvement in quotations may be only temporary: Ceylon, spot, drums, from 1s. 6½d.; smaller parcels, up to 1s. 1½d.; shipment, drums, about 1s. 5d. per lb., c.i.f. Java, spot, drums, about 1s. 7½d.; smaller parcels, up to 2s.; shipment, drums, about 1s. 1½d. per lb., c.i.f.

**CLOVE.**—Business has been rather quieter, market steady: Madagascar, spot, drums, 2s. 7d. per lb., if available; smaller parcels, up to 3s. 3d. English distilled, 4s. 6d. to 4s. 9d. per lb., ex store.

**EUCALYPTUS.**—Business has been rather quieter; shipment quotations are well maintained: Australian, 70 to 75 per cent., tins, 1s. 6d.; drums, 1s. 5d.; 80 to 85 per cent., tins, 1s. 8d. per lb., ex store, with higher prices for small lots; shipment, 70 to 75 per cent., tins, 1s. 5d.; drums, 1s. 4½d.; 80 to 85 per cent., 1s. 7d. per lb., c.i.f.

**GRAPEFRUIT.**—Market has been quiet: Californian, 10s. 3d. to 12s. Florida, 11s. to 12s. 6d. per lb., ex store, as to quantity.

**HO (SHIU).**—Owing to lack of spot supplies, prices tend rather dearer: "improved" now up to 5s., and "extra" quality up to 5s. 4½d. to 5s. 6d. per lb.

**JUNIPER BERRY.**—The demand is fair in smallish quantities: quoted, as to quality, from about 3s. 3d. to 3s. 9d. per lb., for limited quantities.

**LAVENDER.**—There is a dull tone in this market and conditions at the source are not strong: French, 38 to 40 per cent., 12s. to 12s. 9d. Lavandin, about 5s. per lb., ex store.

**LEMON.**—Shipment offers of Sicilian new crop hand-pressed oils are again on a slightly lower level this week, with good brands offering in bulk quantities from 9s. per lb., c.i.f. A fair business is reported. Machine-made oils at the usual discount. Spot quotations for genuine oil are in the region of 10s. to 10s. 9d., with blended oils at cheaper prices. Californian distilled, regular quality, 1 dollar 54 cents per lb., landed. Californian cold-pressed is sharply dearer at 2 dollars 35 cents per lb., c.i.f.

**LEMONGRASS.**—The shipment quotation shows a small recovery and small business is reported: spot, 1s. 6d. for bulk quantities; in drums, up to 1s. 10d. per lb., as to quantity and packing; shipment, 1s. 4½d. per lb., c.i.f.

**LIME.**—Continues weak and dull: West Indian distilled is in the region of 14s. 6d. to 17s. per lb., as to quantity.

**LINSEED.**—Quiet but steadier: raw oil, in small quantities, 26s. 9d. per cwt.; boiled oil, 29s. per cwt., ex works.

**NUTMEG.**—Fair amount of small spot business continues: Dutch and American, from 5s. 4½d. to 5s. 9d. per lb., as to quantity.

**OLIVE.**—Rather quiet, values unchanged: B.P., 1 per cent., 5s. 9d. to 6s. per gallon, in drums. Edible quality, ten 1-gallon tins, in cases, 80s.; twenty ½-gallon tins, in cases, 82s. 6d. per case; drums, 6s. 3d. per gallon, ex store.

**ORANGE.**—Shipment prices for genuine new crop French Guinea oil are reported by brokers to be maintained at 2s. 2d. to 2s. 3d. per lb., c.i.f., in drums there are some cheaper offers: spot, in drums, 2s. 7d. to 2s. 8d.; re-packed in tins in cases, 2s. 9d. to 3s. per lb., delivered. Californian, small drums, 59 cents; two or more cases, 61 cents per lb., ex store. Florida, cold-pressed, 85 cents per lb., in drums, landed, London.

**PALMAROSA.**—Market remains dull, values maintained: spot, about 8s. to 8s. 1½d. per lb. for bulk purchases; shipment is steady at 7s. 6d. per lb., c.i.f. Java oil is available at about 4s. 3d. per lb., ex store.

**PEPPERMINT.**—The Japanese product has sold quite well on spot, and there has been a steady Continental demand for parcels afloat at 4s. 3d., c.i.f.: spot, 4s. 6d. to 4s. 7½d., as to seller. Japanese shippers' quotations for March-April are firm at 4s. 6d., c.i.f., but there has been very few cables this week. A report from the source states the refiners are short and that the farmers are holding for full prices: natural American oil, in drums, continues firm at 2 dollars 25 cents to 2 dollars 35 cents per lb., c.i.f.

**PETITGRAIN.**—Remains quiet and some offers on spot are cheap: spot, in cases, 3s. 6d. per lb.; shipment, about 3s. per lb., c.i.f., as to quantity. French, to come forward, quoted from source at 950 francs per kilogram.

**SPEARMINT.**—Some offers of oil of unspecified quality may be at cheaper prices: U.S.P. oil, spot, about 9s. 3d. to 9s. 4½d.; shipment, 8s. per lb., c.i.f.

**SPIKE.**—Limited business, prices varying as to quality of the oil: genuine Spanish oil is quoted from 5s. to 5s. 6d. per lb., ex store. Blended oils at cheaper figures.

**TURPENTINE (AMERICAN).**—London stocks on February 25 totalled 27,284 barrels: spot, London, 34s. 9d.; Hull, 35s. 9d.; Liverpool, 36s. 9d. per cwt. Market is steady.

**WORMSEED.**—U.S.P., spot, 9s. 9d.; shipment, 9s. 6d. per lb., c.i.f. B.P., spot, 10s. 3d.; shipment, 10s. per lb., c.i.f.

## Commercial Notes

**Jamaican Sarsaparilla Exports.**—Shipments during 1937 were:—

Destination	lb.	£	Destination	lb.	£
United Kingdom ...	49,466	1,576	Belgium ...	9,331	244
Australia ...	4,172	158	France ...	51,064	1,180
India ...	13,532	433	Germany ...	2,290	57
United States ...	1,908	48	Morocco ...	1,680	34
Algeria ...	6,452	156	Peru ...	1,120	25
Total ...				141,015	3,911

During the first nine months of 1938 exports of sarsaparilla root from Jamaica totalled 95,594 lb., valued at £2,324.

**Malayan Derris Root Exports.**—Shipments, showing the chief destinations during the years 1934-37, were as follows:—

Country of Destination	1934	1935	1936	1937
	Cwt.	Cwt.	Cwt.	Cwt.
United Kingdom ...	5,253	8,828	8,139	5,440
British Possessions ...	330	311	305	266
Europe ...	1,500	542	811	1,024
United States ...	2,891	2,250	1,821	3,064
Japan ...	1,305	1,922	2,119	2,426
Netherlands East Indies ...	548	1,606	390	41
Other countries ...	224	591	162	238
Total ...	12,051	16,050	13,747	12,499

**China Exports of Ephedra Herb.**—Shipments from Tientsin during 1937 and 1938 were as follows:—

Destination	1937		1938	
	Bales	Lb.	Bales	Lb.
Belgium ...	113	51,980	—	—
France ...	488	224,480	—	—
Germany ...	303	139,380	49	22,540
Great Britain ...	729	335,340	12	5,520
Netherlands ...	192	88,320	357	164,220
Undesignated European ports	319	146,740	55	25,300
United States ...	2,602	1,196,920	2,311	1,063,060
Total ...	4,746	2,183,160	2,784	1,280,640

**French Psyllium Seed Exports.**—Shipments from the Marseilles district to the United States during recent years have been as follows:—

Year	Lb.	Value	Year	Lb.	Value
		\$			\$
1930 ...	2,026,596	464,445	1935 ...	627,279	39,903
1931 ...	1,180,081	229,837	1936 ...	838,813	78,368
1932 ...	1,287,160	154,421	1937 ...	494,283	163,992
1933 ...	1,000,991	85,433	First ten months 1938	453,051	36,541
1934 ...	1,232,478	95,368			

**Japanese Pyrethrum Cultivation.**—The area under cultivation in Japan for the 1939 crop is expected to show a substantial increase over that of preceding years. The following figures are in acres:—

District	1937	1938	1939
Honshu ...	14,410	15,951	No data
Shikoku ...	6,930	5,929	
Hokkaido ...	47,775	39,531	
Total ...	69,115	61,411	72,290

**Italian Manna Exports.**—Approximately 488 quintals (one quintal equals 220.46 lb.) of manna, valued at 390,000 lire were exported from Italy during the first eight months of the past year, which compares with 844 quintals valued at 582,000 lire in the corresponding months of 1937. Exports of manna during these periods declined from 120 quintals valued at 323,000 lire to 103 quintals valued at 246,000 lire. The decline in exports of this product during the current year is believed to be due, at least in part, to the high prices being maintained by the "Ammasso" (State Manna Monopoly). The "Ammasso" is now asking 16.50 lire per kilogram, for the highest quality (Cammalo Capaci).



# Correspondence

Correspondents may adopt an assumed name, but must in all cases furnish their real name and address to the Editor

## British Pharmaceutical Conference

SIR,—The editorial of this week's *C. & D.* (p. 213) discusses the menace of the chain stores and bazaars and the willingness of the manufacturer to deal with them; the Council of the Pharmaceutical Society of Northern Ireland have had brought to their notice instances where trade filching from chemists was practised by grocers, one of whom actually exhibited a notice to the effect that there was no need to go to the chemist, he having all medicinal articles in stock. . . . There are many who will agree with me in suggesting that the next British Pharmaceutical Conference not only fully discusses, but sets in motion machinery that will effect an entirely new policy for the retail pharmacist, giving him more power, more chance of co-operation and the monopoly of medicine vending to which he is entitled. To devote the whole of the British Pharmaceutical Conference to this object would not be wasting time; in my humble opinion it would be the biggest, and certainly most necessary, step that could be taken to put the retail pharmacist on his proper footing.—Yours faithfully,

London, N.W.1.

PETER J. MORRISON.

SIR,—Commenting on the letter on the above topic by "Senectacus" (*C. & D.*, February 25, p. 225), is not the attitude of those who attend the Conference changing considerably, particularly of late years? I agree that the majority of papers to-day are not likely to be of great interest to chemists in business. At the same time, is it not true that the average chemist is not so interested as he used to be in any scientific paper because his business generally is such that his thinking and practical work is done for him by the scientific staff of the wholesale houses. There is no doubt that the meetings of representatives are growing in interest as the scientific meetings are at a standstill, if not actually declining. These meetings have changed the complexion of the Conference, the majority of representatives are not interested in the scientific side and they seize the opportunity provided for them by the organisers and make the week a part of their holiday. Their rail fares are paid by the Society, and in some cases their Associations pay some small sum towards their expenses. Few of them attend the scientific meetings, and when their official meetings are over they are at a loose end while their ladies are away on their excursions, I spend a hard earned holiday at the Conference and welcome the opportunity we (my wife and I) get at the social gatherings of renewing old friendships and starting fresh ones. Our attitude is, I believe, that of a great number who attend.—Yours truly,

WHOLESALE (26/2).

SIR,—Your correspondent "Senectacus" (*C. & D.*, February 25, p. 225) seems to me to have wandered somewhat from his original position. *Revenons à nos moutons*. He contended that the discussions in the science sessions were generally above the head of the ordinary pharmacist, but, without giving a catalogue of papers, I think I have shown that matters of considerable importance to the practising pharmacist are dealt with in the science sessions. Which laboratories the papers emanate from is beside the point. As to the attendances, the difference between the 200 and the 700 is fully accounted for by the Pharmaceutical Society's delegates, whose meetings are held at the same time as the science sessions, both of which points appear to have been overlooked by "Senectacus." Your correspondent's other contention seems to be that if he cannot join the ladies on sight-seeing excursions the success of the Conference is endangered. If the discussions at the delegates' meetings are so entertaining (and from this I presume "Senectacus" is a delegate, in which case why is he so anxious to join the ladies, whose excursions take place while the meetings are held?) and contain such valuable publicity material, why hold them in secret? Further, it would appear that the public relations officer is missing an opportunity. Apart from delegates, who, after all, are to some extent paid for combining business with pleasure, and the members of the science sessions, there can be few men available for the ladies' excursions.—Yours faithfully,

OBITER DICTUM (27/2).

## The National Formulary

SIR,—Your correspondent A. P. C. (*C. & D.*, February 25, p. 225) seems to be unduly worried about his responsibilities in insurance dispensing. While the altered names for the tablets in the new formulary will no doubt cause some misunderstanding, I fail to see why chemists should have to make certain which tablet the doctor intended before dispensing. After all, the doctor has the same responsibility for noting any changes in the formulary as the pharmacist. Chemists get little enough remuneration for this type of prescription now, without the additional expense and waste of time in trying to find out what the doctor intended. I think it is obvious that in the case of these tablets chemists should dispense whatever is ordered without query.—Yours faithfully,

DOVER'S POWDER (20/2).

SIR,—There is one regrettable feature of the new N.H.I. Drug Tariff Formulary, which I have not as yet seen commented on, and that is that control in its entirety seems to have been taken over by Whitehall. The failure to issue a reasonably convenient reference book will no doubt be excused on the grounds of economy but, as usual with Government departments, pence are saved whilst pounds are recklessly thrown away. The Drug Tariff itself in the past has not been much used by retail chemists and the imprint of the latest edition shows that 18,750 copies have been printed and presumably will be reprinted, every three months—a colossal waste of printing and paper which could have well been done without. Previous issues have stated that N.H.I. Formulary has been issued with "the concurrence of the National Pharmaceutical Union" and that the business section of pharmacy has been co-operating in its compilation. This can hardly be true of the present issue with substitution of liquid extracts for tinctures, a practice more suitable for the dispensing doctor than a busy dispensing chemist. I trust that early steps will be taken by pharmacists throughout the country to have these innovations set aside.—Yours faithfully,

COUNTRY CHEMIST (28/2).

SIR,—Among Mr. George F. Corral's comments on the new National Formulary (*C. & D.*, February 25, p. 225) I note he refers to the use of aq. font. in lead lotions. I have never been able to understand the reason for this. The Formulary is so particular in ordering distilled water for eye lotions, which are diluted afterwards by the patient with tap water, and yet specifies aq. font. for lead lotion, where there is a practical reason for using distilled. When I was studying, the 1898 B.P. was the one in use, and the method of preparing liq. plumbi dil. was to mix the alcohol with the distilled water, then to add the liq. plumbi fort., and I find an old lecture note in my B.P. of that date to the effect that this was to drive off carbonic anhydride to prevent the formation of plumbi carb. The use of tap water, containing carbonates, and in the strength ordered in the National Formulary, would appear to be an exact reversal of this theory. The replacing of tinct. ipecac. by ext. ipecac. liq. may effect some small economy, but it is not so easy to get accuracy when measuring small quantities in minims, and there seems to be no settled method in these revisions for, if I remember rightly, on a previous occasion ext. nucis vom. liq. was discontinued in favour of the tincture. The use of syrup. tolu. in linct. codein. co. not only changes the colour of the finished product, but it eliminates the small percentage of hydrocyanic acid, which is supposed to have had some therapeutic effect. With such preparations as liq. antisepticus N.F., the only thing the chemist can do is to order it from his wholesale drug house. Would not the opinions and experiences from pharmacists who are engaged in dispensing numbers of panel prescriptions daily be of help in future compilations?—Yours faithfully,

FORMULATE (25/2).

## Sixpenny Proprietaries

SIR,—In your article on "Co-operative Bazaars" (*C. & D.*, February 25, p. 213) you ask if the pharmacist really wants to compete with threepenny or sixpenny articles. I think the answer is definitely he does not. To be really profitable the



sale of low priced lines must be accompanied by a large turnover, so that the expenses are very considerably reduced in proportion to the takings, or else the goods must show a large margin between cost and selling price. Neither of these considerations applies to the sale of threepenny and sixpenny lines by the small chemist. A firm with branches everywhere can order several hundred pounds worth of one article, and pay cash with order, so naturally expects, one might almost say dictates, a special discount in accordance with the size of its order, and I should imagine there are few manufacturers who would refuse either the order or the discount. The pharmacist on the contrary can at the best order a £3 or £5 parcel, he has to take the parcel as packed by the manufacturer at a stipulated price, with perhaps an extra 2½ per cent. for a window display. With the growth of the restricted price store, and the public partiality to the "open access" type of display, the manufacturers of proprietaries one after another, even those who said at first they never would, have brought out threepenny and sixpenny packs of lines which originally were never less than 1s. 3d., and some of them 1s. 6d. or 2s., and the pharmacist, whether he likes it or not, is compelled to stock these sizes, otherwise he would lose still more of his counter trade in these articles. Looking at it from one point of view these small sizes are to the advantage of neither party, the chemist takes less money per customer, and therefore increases his overhead charges per sale, and the purchaser gets a smaller quantity for his money in comparison to that in the larger packs. From the manufacturers' side, the introduction of a sixpenny size opens the market to a much larger section of the public, who could not afford to expend 1s. 6d. or 2s. at once. It may be so, but I do not think the chemist gains much advantage from this as there are always customers who look at the amount of cash laid out at the moment, and not at the most economical way to buy. I think most chemists have found the sales of the larger packs have dropped considerably since the sixpenny and threepenny sizes were marketed. If the co-operative societies were to open bazaar stores, would the dividend be given to members on their purchases, as it is in their existing shops? If so, then the present bazaars might feel the competition more than chemists. So far as the main competition with chemists is concerned, there would not be any drugs or medicines on sale if the sections of the Act relating to the ownership of drug stores are enforced, as they should be, and in this respect the existing bazaars are in a favourable position, not being the owners of registered pharmacies they can sell drugs at any of their premises.—Yours faithfully,

PHARMACY FIRST (26/2).

#### Attendance at Meetings

SIR,—Granted that, as "Xrayser" remarks in his "Topical Reflections" (*C. & D.*, February 11, p. 143), your reports of association meetings contain all chemists need to know, but if every pharmacist were to confine his participation to reading the reports there would be nobody present at the meetings. The attendance as a rule is poor enough as it is. In fact, it is only when some outstanding speaker is announced or some vital question of the moment is to be discussed, that there is a sufficient number of members present to warrant the meeting being termed representative. I use the term representative meaning there may be perhaps fifty or sixty members present out of a possible two or three hundred, in quite a number of instances. "Xrayser" also says there should in ordinary circumstances be a good attendance at the annual meeting. I agree. Actually, I consider the annual meeting to be the most important one of the whole year, because it is held to appoint the officials who are to run the association, and it is an opportunity for every member to express his views on the way the association is carried on and to nominate and vote for fresh officials. But after many years' experience of association work I can only say that usually I have found the attendance at the annual meeting to be poorer even than that at ordinary meetings. There is little difficulty in getting members to dances, dinners and outings, so that for all effective purposes an association becomes a social centre. We all require adequate relaxation, but an association of pharmacists is formed primarily for business and technical interests, and one meeting a month during the winter session should not be too many for members to attend, and a full regular attendance would enable a little more energy to be infused into the work of improving the conditions of pharmacy.—Yours faithfully,

OLD OFFICIAL (10/2).

## Miscellaneous Inquiries

We do not undertake to analyse and report upon proprietary articles nor to publish supposed formulas for them

W. R. (1/3).—OILSKINS.—The oil used for waterproofing oilskins is boiled linseed oil, i.e., linseed oil heated with litharge or other "driers," which cause the oil to dry more quickly. We have no record of the employment of sulphur in this process, nor can we see any reason for its use.

Y. L. (24/2).—LIQUID LIP ROUGE.—One type of rouge consists of an alcoholic solution of a suitable dye with the addition of a small amount of water, and also a little glycerin, added for its soothing effect and pleasant taste. Reports vary on the virtues of liquid rouges containing much alcohol, some users complaining of the excessive drying effect on the lips. An alternative type of preparation can be made from a water-soluble dye, a wetting agent such as sodium lauryl sulphate, 10 to 15 per cent. of alcohol to assist in the drying, and gum as a thickening. The following is a representative formula:—

Gum	..	..	..	..	..	0.5
Alcohol	..	..	..	..	..	10.0
Wetting agent	..	..	..	..	..	0.1
Preservative	..	..	..	..	..	0.1
Dye	..	..	..	..	..	2.0
Water	..	..	..	..	..	87.3

Mix the gum, alcohol and preservative and pour into the solution of the dye and wetting agent in water. Allow to stand for one or two days and filter. Suitable colourings for both types of product can be obtained from manufacturers of cosmetic dyes.

S. P. L. (1/3).—HAIR RINSES.—The faint yellow colour of bleached or naturally white hair is usually neutralised by treatment with a very weak solution of a blue dye. Methylene blue solutions are used for the purpose. A good solution for this purpose can be prepared by using a mixture of methyl violet and malachite green. Separate stock solutions of these are prepared by dissolving 10 gm. of each in a litre of distilled water, care being taken to see that all the crystals of each substance are completely dissolved. The blueing is carried out in a basin of warm water to which small quantities of the dye solution are added, the amounts of each being adjusted so as to produce the shade required to neutralise the yellow tint of the hair. It is often advantageous to add to the bath a few drops of acetic acid and a little glycerin.

## Retrospect of Fifty Years Ago

Reprinted from

"The Chemist and Druggist," March 2, 1889

### The Proposed New Railway Rates

By an Act passed during the last Parliamentary session the railway and canal companies of Great Britain were instructed to deposit with the Board of Trade within six months' time complete specifications of the maximum charges which they desire to be empowered to make on the various classes of merchandise forwarded over their lines. . . . It may hardly be necessary to say that the charges alluded to are not applied directly in the case of what are known as "smalls" or packages of goods the gross weight of which does not exceed 5 cwt. The rates for carrying these are lumped into a tariff in which terminal charges are taken into account, but are not specifically indicated. The London and North-Eastern Railway Company, for instance, claim simply double conveyance rates for these as the maximum. It is the opinion of experienced wholesale druggists that the new maximum rates, if actually charged, will make the cost of carriage of drugs and pharmaceutical goods something like 25 per cent. higher on the average than it is at present. As a matter of fact, the companies, very rarely do charge the maximum rates they are allowed; competing lines and canals tend to keep down prices. But it seems certain that in any case the companies mean to get more than they have hitherto had for empties. This will be the real rock of offence to druggists, and we are glad to hear that some opposition is threatened on the part of the London wholesale druggists. Mr. Umney (Wright, Layman & Umney) and Mr. Francis (Hearon, Squire & Francis) are interesting themselves in the matter, and to one of them should be addressed any facts or considerations which will aid them in their action.





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ESSENTIAL OILS**

#### COD LIVEROIL

Phenol  
Salicylates  
Marseilles Soap

**3 LLOYDS AVENUE  
LONDON. E.C.3**

## Iglodine.

### Throat Pastilles & Throat Tablets

are being extensively advertised as a preventive  
against Colds and Influenza. Do not disappoint your  
customer by being out of stock. The Pastilles are  
put up in attractive tins at 6d. each; Throat Tablets  
in 6d. tubes and 1/- bottles. Usual trade discounts  
allowed.

**The Iglodine Co., Ltd., Newcastle-on-Tyne**

### BLACKWELL HAYES & Co. Ltd.

*Manufacturing Chemists*

**54-58 Moor St., Birmingham, 4**

## GALENICALS EXTRACTS

Pharmaceutical and  
Food Colours

## ESSENCES

for all

## TRADES

**QUALITY ABOVE  
B.P. STANDARDS**



HERE'S YOUR OPPORTUNITY  
TO SELL AN ATOMIZER!

Whenever a customer asks you for nasal drops you will do well to explain the advantages of using an atomizer. DeVilbiss Atomizers are offered at prices which are within the reach of all. Stock them, recommend them, and you will be surprised how many you sell.



No. 25

A nose and throat Atomizer of high quality for oil or water solutions. Gives a fine, continuous spray. Price from 32/- to 40/- per doz.



No. 20

A compact and dependable nasal Atomizer producing a medium spray from either oil or water solutions. Price from 26/- to 30/- per doz.

CVS-150

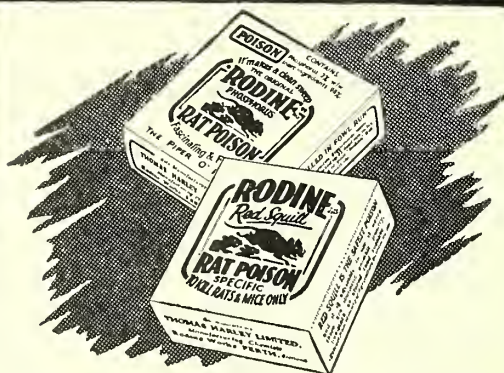


## DeVilbiss ATOMIZERS

THE AEROGRAPH CO., LTD., 43 Holborn Viaduct, London, E.C. 1

Sole Distributors of De Vilbiss Products in the United Kingdom

Telephones: HOLBORN 1257 & 1258



## It pays to sell Rodine . . .

You can do good business selling this famous raticide. Rodine is used and recommended by leading sanitary authorities, farmers and gamekeepers in all parts of the country.

Stock both kinds—Rodine Phosphorus the original Rodine and Rodine Red Squill the domestic kind, harmless to pets and domestic animals.

Both kinds retail at 7½d. and 1/3.

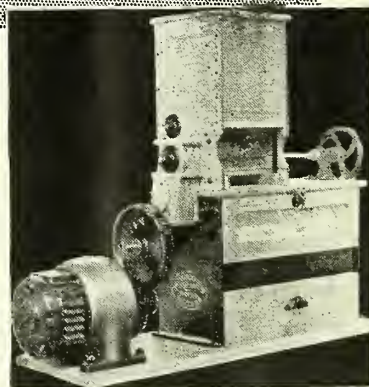
Made by Thomas Harley Ltd., Rodine Works, Perth

# RODINE

## RAT KILLER

## GARDNER "QUICK-CHANGE" POWDER DRESSER

For friction-free powder dressing, smooth, fine textured powders, quick change-overs to various powders, long life, trouble-free running, economy and efficiency.



Full information from:

WM. GARDNER & SONS (Gloucester), LTD.  
Bristol Road, Gloucester.

Telephone: 2288. (3 lines) Telegrams: "Gardner, Gloucester"  
London: 19 Gray's Inn Chambers, 20 High Holborn, W.C.1  
Telephone: Chancery 7347



# BOX'S PILLS

THE INDIGESTION  
REMEDY  
THAT GIVES  
DOUBLE  
RESULTS!

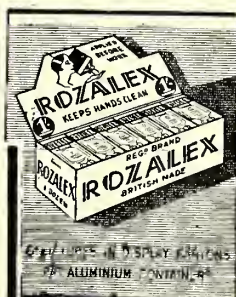
**1 INSTANT SALES.** National advertising in selected media ensure that 4,000,000 people see the BOX'S PILLS advertisements every week. A large percentage of this number are your potential customers — are you prepared for the demand?

**2 REPEAT CUSTOM.** Not only do BOX'S PILLS sell quickly — but they are effective. Satisfied customers will readily recommend them to others — to your profit.

Perhaps your business needs a line that will sell quickly and bring in substantial profits! Thousands of Pharmacists have already found that BOX'S PILLS bring in the extra profits — try a sample order yourself!

P.A.T.A. Retail Prices, 1/3, 3/-, 5/-, 12/- and 22/-.  
Send for details of generous Trade Terms today.

**W. H. BOX, 161 KING ST., PLYMOUTH**



## INCREASE YOUR ROZALEX SALES

By displaying this attractive counter display of 1 dozen 1/- tubes.

Display cards and cartons of 1 doz. 6d. tubes.

Aluminium containers 2/6.

SHOW ATTRACTIVE PROFIT.

**Keeps Hands Clean — Keeps Hands Healthy**  
From your usual wholesaler or direct.

Show matter and literature supplied on request to:

**ROZALEX Ltd.**

YORKSHIRE HOUSE, CROSS STREET - - - MANCHESTER, 2

## Ergoapiol-(Smith)

REG. U. S. & FOREIGN COUNTRIES  
PAT. OFF.

CONSTANT prescription demand is assured by our continuous and extensive advertising campaign. ERGOAPIOL should be maintained at all times. An adequate stock of ERGOAPIOL in packages of twenty capsules each. Supplied only in packages of twenty capsules each. For the mutual protection of the ethical pharmacist, the physician and our product, the initials "MHS" are embossed on the inner surface of each capsule, visible only when capsule is cut in half as shown.

**MARTIN H. SMITH COMPANY**  
NEW YORK, N.Y., U.S.A.

THOS. CHRISTY & CO., 23 OLD SWAN LANE, LONDON, E.C. 4  
Agents for Great Britain and Ireland



## Yeast-Pac appoint Newbery and Phillips sole distributors

We have pleasure in announcing that we have appointed Messrs. Newbery and Phillips Ltd., of 31, Banner Street, London, E.C.1 to be Sole Distributors of Yeast-Pac Beauty Masks, in the United Kingdom.

We would like to take this opportunity of thanking our friends in the trade for their valuable support in the past, and of assuring them of our sincere desire to improve our service to them, and the goodwill of our product. The former will be achieved by this new appointment, and the latter by a greatly extended advertising campaign in National Newspapers and Magazines.

**Terms and Prices**  
will remain unchanged

**RETAIL PRICES :** 1 sachet 6d.  
3 sachets 1/3  
7 sachets 2/6

**BONUS.** A new bonus scheme will be announced shortly.

**TERMS:** 33 $\frac{1}{3}$ %

(Orders for less than 1 doz. 6d.  
sachets charged at 4/3 per doz.)



A subsidiary of Cosmetic Yeast Ltd.

**YEAST-PAC CO., 193 REGENT ST., LONDON, W.1**

**LINES**  
WORTHY OF  
**YOUR ATTENTION**

**LYSOL B.P.**  
**OLIVE OIL**  
**HYDROGEN PEROX.**  
**LIQUID PARAFFIN**

**BULK OR IN SMART, ATTRACTIVE  
PACKS**

CONTRACTS FOR  
SEASON'S REQUIREMENTS  
AT COMPETITIVE RATES

WRITE  
FOR  
QUOTATIONS

**ROBERT  
BLACKIE**  
**SHEN WORKS**  
MELON ROAD,  
LONDON, S.E.15

Telephones { ROD 3874  
ROD 3875  
ROD 3876

Telegrams:  
USHENSPUNA, LONDON

**"SPUN"**  
**OINTMENTS**

*Armstrong's*  
TAPER  CORKS

ARMSTRONG CORK CO. LTD.  
KINGSBURY, LONDON, N.W.9.

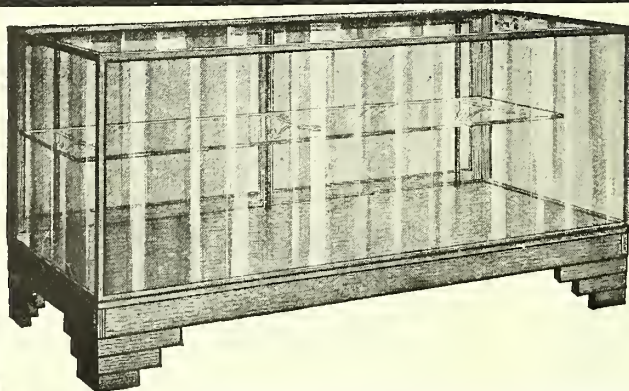
TAPERED, PYRAMID, DOMED AND  
FLANGE **CORKS**  
COMPOSITION AND BAKELITE  
**STOPPERS**

THE MOST COMPETITIVE MANUFACTURERS IN  
THIS COUNTRY

**MUNDET CORK PRODUCTS, LTD.**  
20/21 BERMONDSEY SQUARE, LONDON, S.E.1.

Telegrams:  
MUNDETCOMP, BERM, LONDON

Telephone:  
HOP 2043-6



**BUY DIRECT from  
THE ACTUAL MAKERS**

No. C.D. 5260R. Glass Counter. 6 ft. long  
× 3 ft. high × 2 ft. deep. Glazed 1-in. drawn  
plate glass, sliding glass doors at back. One  
row of 12-in. glass shelves.

Polished Light Oak, £8.15.0

Mahogany finish . . . . £90.0

Carriage extra

May we send you our latest 84-page Catalogue  
No. CD 1820?

**DUDLEY & COMPANY LTD.**  
451 Holloway Road, London, N.7  
City Showrooms: 65 FORE STREET. E.C.



# DAILY SELLERS

Few lines combine the merits of rapid and consistent turnover coupled with a generous margin of profit. Outstanding among these few are the BEECHAM PRODUCTS—Beechams Pills, Beechams Powders, Beechams Lung Syrup and Lactopeptine.

The sound reputation and unparalleled goodwill of Beecham Products have been built on a foundation of consistent advertising, which has been carried on for 90 years—a record which has made the name BEECHAM almost traditional.

Are you sharing in our success? Use the display material which is provided free on request... link up with our National Schemes of publicity, and Beecham Products will add to your profits daily.



BEECHAMS  
PILLS *Brand*

BEECHAMS  
POWDERS *Brand*

BEECHAMS  
LUNG SYRUP *Brand*  
LACTOPEPTINE *Brand*



# BEECHAM PRODUCTS

Write  
for  
Free Show  
Material

*make daily profits!*

BEECHAMS PILLS LIMITED, ST. HELENS, LANCs.



# DON'T TOUCH OR —

Here at Holmes Chapel, Benger's Food products are made "untouched by hand." This unbreakable rule applies through all processes of manufacture, and is indeed only a minor part of the hygiene applying to the scientific products we make for the medical profession and the public.

There is no purer product than Benger's Food. We advertise this claim and it is maintained on a basis of solid fact.



Here, for example, are two girls working one of the many filling machines. They are alert workers, for the filling work is fast, and if an accidental slip brings the food in contact with the fillers' hands, away it goes to the discard.



BENGER'S FOOD, LTD.  
Holmes Chapel, Cheshire.

**Do your  
Customers know  
how easy Benger's  
is to make?**

Just take half a pint of milk and bring it to the boil. Whilst the milk is heating, take a level tablespoonful of Benger's Food and mix to a smooth cream in a basin with four tablespoonfuls of cold water. Take the boiling milk, and immediately it begins to settle in the pan pour slowly (taking about thirty seconds) on the cold mixture, stirring all the time. When cool enough, the Food is ready to drink. Add sugar to taste. No more trouble than that!



"DORSELLA" MILK FOOD

## ENGLISH DRIED MILK

Enquiries are solicited for the following:

FULL CREAM "DORSELLA" DRIED MILK  
HALF CREAM  
SEPARATED "PARAGON" CASUMEN, SOLUBLE MILK  
PROTEID  
SWEETWHEY, CRYSTALS or POWDER  
KENCREAM FOR PUPPIES  
UNITA (Dorsella and Casumen)  
CHOCOLATE AND MILK  
DRIED BUTTER MILK

Supplied in Bulk, Tins or Cartons

Quotations and samples gladly sent on request.

**PRIDEAUX'S LTD.,**  
MOTCOMBE, SHAFTESBURY, DORSET

Telephone: Shaftesbury 4

**H. E. STEVENSON & Co., Ltd.**

10 Pancras Lane,  
Queen Victoria Street, London, E.C.4

## Halibut Liver Oil

Biologically Tested and Standardised

60,000 Int. Units Vit. A per gramme  
2,000 " " " D " "

**SPECIAL PRICES IN BULK**

Also in other strengths.

5 c.c. vials in cartons. 12/6 per dozen.

Bottles of 25 x 3m Capsules beautifully packed. 13/6 per dozen.

**H.L.O. Emulsion**



# PETROLEUM JELLIES

WHITE, LEMON, YELLOW, AMBER, RED, GREEN

# WHITE & COLOURED OILS

YELLOW, GREEN, RED FOR BRILLIANTINE, etc.

# LIQUID PARAFFIN

COLOURLESS, TASTELESS, ODOURLESS  
ALL SPECIFIC GRAVITIES

B.P. AND TECHNICAL QUALITIES

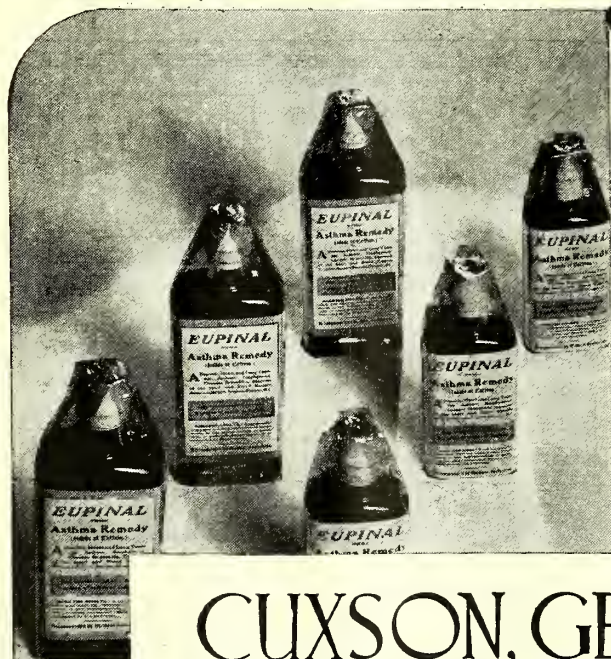
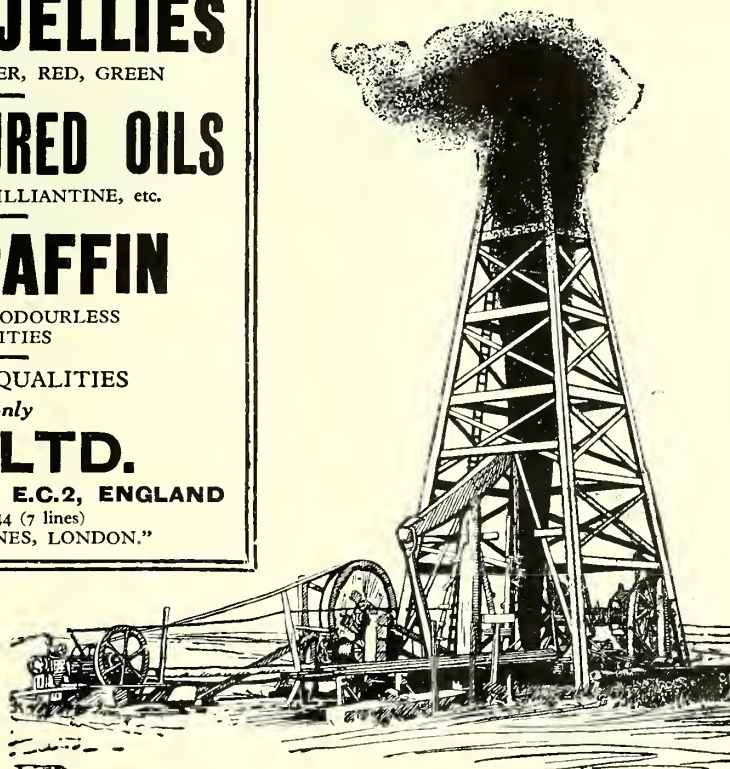
*Wholesale Trade only*

# STERNS LTD.

16 FINSBURY SQ., LONDON, E.C.2, ENGLAND

Telephone: NATIONAL 7644 (7 lines)

Telegrams: "CENTUMVIR, PHONES, LONDON."



# Eupinal

Be assured of increased business and recommendations. Eupinal is C.F.— of course. This stable solution contains Iodide of Caffeine and is wonderfully efficient in cases of Chronic Bronchitis, Spasmodic Asthma, as a diuretic and to stimulate the heart's action.

# CUXSON, GERRARD & CO. LTD.

Manufacturing Chemists  
OLDBURY, BIRMINGHAM





## FRESH FROM THE SEA

Why is Norwegian Cod Liver Oil so pure, and why does it keep so well?

Because the oil is produced under the most favourable conditions, only a few hours after the cod has been caught. And also because every precaution is taken to ensure perfect cleanliness in the manufacturing process based on centuries of experience and perfected by modern technical methods. These facts account for the outstanding quality of Norwegian Cod Liver Oil.

In order to maintain the high standard of Norwegian Cod Liver Oil, a law has been passed subjecting the export trade to a strictly enforced system of State Control. Norway is the only country in the world which has established such qualitative control of its output of cod liver oil.

## NORWEGIAN COD LIVER OIL

is pure and health-giving. It contains Vitamins A and D in correct ratio.

For printed matter, apply to:  
Reklamefondet for Norsk Medicinfran, P. O. Box 226, Bergen, Norway.

ESTABLISHED 1793

### ATKINSON & BARKER'S INFANTS' PRESERVATIVE

The Best and Safest Infants' Medicine of  
140 years' standing.

Does not contain any Scheduled Poison.

ROBERT BARKER & SON, LTD.  
13 WESLEY ST., C. on M., MANCHESTER

'SPECIAL' BACK & KIDNEY PILLS  
'URICURE' TABLETS  
'NEVROIDS' FOR WOMEN  
'MANOIDS' FOR MEN

From all  
SUNDRIES HOUSES  
or Post Free from -  
THE  
ACTON PILL & TABLET CO LTD  
ASH VALE, SURREY.

REGULARLY ADVERTISED AT PROTECTED FIXED RETAIL PRICES

• **TEASDALE Brand CHLORODYNE** 11/- & 27/-  
per doz.

**Dr. Lane's CATARRH CURE** 12/-, 28/9 & 48/-  
per doz.

**NATURE'S HERBAL OINTMENT** 12/-, 28/9 & 48/-  
per doz.

• Supplied from stock by your usual Wholesaler, or direct.  
Carriage paid on all orders value £1

THE TEASDALE CHLORODYNE CO., FITZWILLIAM STREET, HUDDERSFIELD

# HALIBUT LIVER OIL

## IN BULK

ALSO

## IN CAPSULES

### ROBERT FERBER LTD

CARLTON WORKS  
ASYLUM ROAD  
LONDON, S.E.15



# DO YOU KNOW?

**BROOKLAX** gives you more profit.

**BROOKLAX** gives your customers more tablets.

**BROOKLAX** keeps your money at home—made in England.

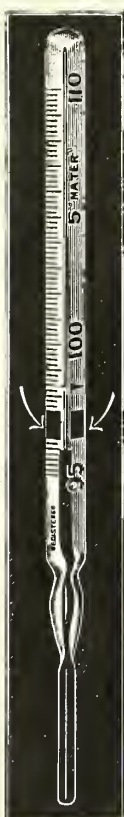
**BROOKLAX** was the first product on the C.F. List.

**BROOKLAX** quality was the best from its inception.

**BROOKLAX** display material is not shown by Grocers and Drug Stores.



# BROOKLAX IS YOUR LINE



## THE "MATER"

**CLINICAL** REGD.  
The position of the Mercury column is at once perfectly plain. Red markings above 99.4.

## ALL TYPES OF CLINICAL AND OTHER THERMOMETERS

**PERKEN, SON  
& CO. LTD.**

(ESTABLISHED 1852)

Price List on Application:

8 HATTON GARDEN,  
LONDON, E.C.1

Telephone: 0724 Holborn

Telegrams: "Optimus, Smith, London"

*As she's reading  
her favourite Mag*

**You're  
Selling**

**TOWN  
TALK**

'TOWN TALK' advertising in her favourite magazine has made her one of your most regular customers. Regular, because once she's tried 'TOWN TALK' Silver Polish she'll use no other. And remember she's not the only one, for 'TOWN TALK' Silver Polish is consistently advertised in National Daily News-

papers and high class Women's Journals, the combined nett sales circulation of which is over 15,000,000 monthly. Therefore new users are constantly increasing.

Display these repeat order profit-bearing lines, and get your share of this increasing business.

### ORDER DIRECT OR FROM

**MANCHESTER:**

D. Mawdsley & Co.  
James Woolley Sons & Co., Ltd.

**LEEDS:**

Goodalls (Leeds) Ltd.

**LEICESTER:**

E. H. Butler & Son.

**LONDON:**

Brooks & Warburton, Ltd.  
May, Roberts & Co., Ltd.  
Butler & Crispe

**LIVERPOOL:**

Ayrton, Saunders & Co., Ltd.

THE TOWN TALK POLISH CO., MANCHESTER, 10

## "SURCO"

RELIABLE

## ELASTIC HOSIERY SEAMED & SEAMLESS

For special garments to  
measure we maintain a 24  
hour service.

:: BODY BELTS ::  
TRUSSES :: SUNDRIES

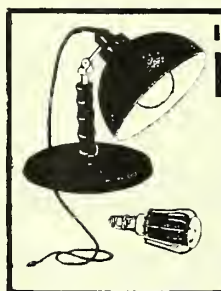
*Permit us to quote you*

## SURGICAL HOSIERY CO. LTD.

Russell Street :: NOTTINGHAM

Telephone No. 75903.

Telegrams: SURGICAL NOTTM.



## RADIARAY

ELECTRO-MEDICAL LAMP  
(Infra-red & Radiant Heat)

BIG VALUE—BIG PROFIT

Backed by Window Display,  
Showcards, Booklets and  
Leaflets.

## HINDERS LTD.

178, 192 Estcourt Road, London, S.W.6

Retail from 30/-  
(as illustrated, 32/6)  
to 6 Gns. Details  
from Actual Makers:  
Makers of Electro-Therapeutic Equipment for Hospitals, etc.

## SOUTHALLS SAN TOWELS

WRAPPED in plain brown  
paper parcel—with carrying  
string and . . .  
PACKED IN CARTONS  
for you to display.



"K" and 12 for 1/-  
6 for 6d. 1/3 · 1/7 · 2/1  
· 2/4 · 2/9

also makers of 'ORIGINAL' & 'CELTEX'



# Four 1/- packets of Tampax **FREE**

Sanitary Protection worn Internally

**Obtain this special Window Display  
Bonus Parcel NOW by ordering  
one dozen of each size of Tampax.**



**OFFER CLOSES  
ON APRIL 15TH**

ORDER	COST	SELL FOR	PROFIT
1 Doz. 1/6 Size	13/6	18/-	4/6
1 Doz. 1/- Size	9/-	12/-	3/-
1 Doz. 6d. Size	4/6	6/-	1/6
4 Special Bonus Packets	FREE	4/-	4/-
<b>TOTAL OUTLAY 27/-</b>			<b>TOTAL PROFIT 13/-</b>
<b>48% PROFIT ON COST</b>			

If you have not already taken advantage of this attractive bonus offer—do so NOW. The offer closes on April 15th—so that there is no time to lose!

Tampax brings you quick, easy profits *every month of the year*. It is easier to stock—easier to sell than ordinary sanitary towels. Supplied only in small packets of uniform type, Tampax needs a minimum of space for effective display.

The demand for Tampax increases month by month. Already over 8,000,000 packets have been sold!

Advertising appealing to millions of women is now in full swing. Tampax advertisements are appearing regularly in all the leading women's monthly and weekly journals. Every Tuesday and Friday morning at 11 a.m. "Fashions from Paris,"

a series of Tampax radio programmes broadcast from Poste Parisien, is telling women about Tampax in the intimacy of their homes.

Every week hundreds of women in your own district are reading and hearing about the new sanitary protection. *They are buying Tampax where they see it displayed!*

Send in your order for Tampax *today*—and make sure of your extra 4/- profit and valuable new customers.

*Sole Distributors: SPLENDOR LTD., 5, BEASTMARKET HILL, NOTTINGHAM for Tampax Ltd., 10, Bolton St., London, W.1. Factory: Belvue Rd., Northolt, Middlesex. Stocked by the leading wholesalers.*


**WOMEN BUY TAMPAX—where they see it displayed!**

**OVER 8,000,000 PACKETS OF TAMPAX HAVE BEEN SOLD**

## SPETON

THE IDEAL  
CONTRACEPTIVE

Highly recommended  
by the MEDICAL  
PROFESSION



**LIBERAL PROFITS**  
**TUBES OF 12**  
**TABLETS 3/6**

Showcards and  
Display Material will  
gladly be sent on  
request

**SPETON—A TEMMLER PRODUCT**  
Sole Concessionaires for the U.K. and Dominions  
**COATES & COOPER Ltd.**  
**94 CLERKENWELL ROAD, LONDON, E.C.1**

## GARDINERS

for **OVERALLS**



### HIGH GRADE OVERALLS

**Long Coats**  
White, Khaki or Grey  
7/6, 9/6, 11/6  
Super Quality, specially shrunk,  
13/6

**Long Coats**  
White, Khaki or Grey, hard  
wearing  
**SPECIAL OFFER 5/11**

**Shop Jackets**  
Super White Drill  
4/11, 5/11, 7/11

We hold a large and varied  
stock of every kind of protective  
clothing. Special attention to  
Post Orders. Cash refunded if  
not approved. Postage paid  
on orders over £1.

Write or phone B1Shopgate  
6751 for illustrated Price List

**GARDINER & CO. (THE SCOTCH  
HOUSE) LTD.**  
**1, 3 & 5 COMMERCIAL ROAD, LONDON, E.1**  
OPPOSITE THE NEW ALDgate EAST STATION



**LIVERPOOL VIRUS**  
THE SAFE RAT & MOUSE DESTROYER

**Will not harm your cat or dog**

**"MY COUGH HAS GONE!"**

This is what thousands of sufferers delightfully exclaim after taking VENOS CURE.

**VENOS LIGHTNING COUGH CURE**

**CROMESSOL, VENOS, LIVERPOOL VIRUS & D.D.D.**  
talk to 3 million families seven days a week through the **RADIO TIMES**

### Other Products for you to display

Alka-Seltzer	Iron Jelloids
Allenburys Diet	Kolynos
Allenburys Pastilles	Lux Toilet Soap
Angiers Emulsion	Macleans Brand
Bovril	Stomach Powder
Bengers Food	Milk of Magnesia
Bob Martins Condition	Tablets
Powders	Macleans Peroxide
Bourmiva	Toothpaste
Bisurated Magnesia	Meritor Toothbrushes
Braggs Charcoal	Musterole
Beechams	New Vinolia
Bemax	Nostroline
Brylfoam	Odol Tooti-paste
Bell's Cat Powders	Optrex Lotion
Crookes Halibut Liver	Pears Soap
Oil	Ponds Creams
Carters Little Liver	Phosferine
Pills	Philips Yeast Products
Calverts Tooth Powder	Phillips Dental
Dettol	Magnesia
Erasmie Shaving Stick	Phillips Magnesia
Famel Syrup	Creams
Fynnon Salt	Sanatogen
Gibbs S. R. Toothpaste	Snowfire Jelly
Gibbs Dentabs	Steradent
Gibbs Dentifrice	Scotts Emulsion
Gibbs Cold Cream	Silexkrin
Gibbs Shaving Cream	Sloans Liniment
Genasprin	Sal Hepatica
Glymiel Jelly	Tokalon
Horlicks	Trufood
Hinds Honey and	Trufood Follow On
Almond Cream	Vaseline Hair Tonic
Instant Postum	Vapex

They are advertised regularly in the Radio Times.

SPRAY SOME CROMESSOL OR WE SHALL ALL GET 'FLU'

**ISOLATE 'FLU with a Cromessol Spray**

**COMPLETE OUTFIT**  
Consisting of sprayer, Glass Container and Bottle of Essence sufficient to refill container six times **7/6**

**RENEWAL ESSENCES**—  
Ordinary 2/6, Double Size 4/6 Extra Large 7/6  
In Standard Perfume, Cologne, Sweet Lavender, Carnation or Sauge-Peppermint

If friends visit with colds; if children develop coughs, or if father goes down with 'flu, spray Cromessol. Attack germs in the air before they get you. Six times stronger than carbolic. Perfumed like spring flowers. Cromessol keeps the air sweet and safe.

**CROMESSOL**  
FRAGRANT DISINFECTANT

From all chemists (ask for a demonstration) including the large Drug Stores, or direct from the sole manufacturers, THE CROMESSOL CO., LTD., 140 B, BRAND ST. BRISTOL GLASGOW & W.I.

The Radio Times reaches about 3 million families each week. This means that its advertisements are read by one family in every four in your district. Consequently, the products which are regularly advertised in its pages are ensured of a steady demand among your own customers. You can turn this demand into profit for yourself by always keeping these goods in stock and displaying them well.

Feature Goods Advertised in the  
**RADIO TIMES**  
Reaches 1 in 4 of your customers



# REMARKABLE SCIENTIFIC DEVELOPMENT IN THE FEEDING OF DOGS

Correct diet **GUARANTEED** by new food supplement

## 'ADMIN' SUPERSEDES COOPER'S VITAMIN RATION

★ STOCKS REPLACED FREE OF CHARGE ★

**ADMIN** *Cooper's new food supplement for dogs is now being announced in the dog papers as 'BEST NEWS FOR DOGS since man first kept them'.*

*In fact it is the first unmixed blessing to come dogs' way since they all had to catch and kill their food themselves because they had no masters to feed them (and, at a pinch, to feed)—man's first genuine good turn to dog for twelve thousand years or more!*

### The Curse of Domestication

Though dogs naturally didn't always get enough to eat in their pre-man period, what they did get had full nutritional value. No primitive dog's diet was deficient in vitamins or minerals, which incidentally the less attractive parts of animals are richest in—blood, entrails, bones. To-day the average well-cared-for dog suffers rather worse than his master from our modern over-refinement of food. It is a proper piece of irony that the bio-chemist should repay this immemorial debt of man to dog, with ADMIN, before putting his own diet on a proper basis, there being still no food supplement of this complete sort available to the public for their own benefit.

### All Deficiencies Made Good

ADMIN fortifies food. ADMIN will make up everything that's missing from any dog's diet in the way of minerals and vitamins. Never before has such a claim been possible, in any sober scientific sense. Until the year before last, not enough was known about diet for the thing to be done. As soon as it could be done, the Cooper Research Bureau did it, proved the product by trial to the full, and in due time authorized its sale by the name ADMIN. ADMIN accordingly replaces Cooper's

Vitamin Ration, which was as near the mark as anyone could get but now is out of date; and all supplies of C.V.R. are being withdrawn from retailers' shops. Any stocks you hold will be replaced with ADMIN *ad valorem* free of charge if returned before the end of March.

### Ingredients and Effects

ADMIN contains a minimum per pound of 15,625 international units of vitamin A; 3,906 i.u. of vitamin D and 2,510 of vitamin B<sub>1</sub>; and proportional amounts of the rest of the vitamin B complex and vitamin E, which have as yet no international standard. It supplies assimilable calcium, phosphorus, iron, copper manganese, and iodine in the optimum quantities and proportions.

In particular, calcium with its indispensable adjunct, phosphorus, is essential for strong bones, good teeth, and the prevention of rickets and (probably) hysteria. Without iron in proper quantity—and iron in turn depends on copper to get its job done—blood-making and cell-making are both impaired, while the working of the thyroid gland absolutely depends on iodine. And in general, mineral deficiency, in dogs as in human beings, often opens up the way for infections and even more frequently accounts for the difference

between well-being and merely being alive.

### The Indispensable Vitamins

Dogs don't suffer from scurvy and other 'deficiency' diseases due to lack of vitamin C, and it seems clear that they manufacture their own supplies of this vitamin; but the rest must be provided—A and B for growth, prevention of eye disorders, resistance to respiratory infection, and nervous stability, D for strong bones, good teeth, and prevention of rickets, and E against sterility.

The addition of ADMIN to a dog's ordinary food will accordingly prevent all 'deficiency' disorders (including the habit of eating excrement, which is the main cause of round-worm infection); and it cannot fail to increase any dog's powers of resistance to all disease. You can recommend it with every confidence to your customers not merely as a food supplement, but also for dogs that are 'off colour' and in need of a tonic.

## ADMIN

is packed in 6d. and 1/6 cartons—a week's supply and a month's for the average dog—and 7/6 tins (seven times the 1/6 quantity). Trade terms—less 33 1/3% and less 5% cash monthly on the cartons, and less 25% and less 5% on the 7/6 tins.



The Cooper Research Bureau, which has an international reputation in parasitic research, devised the Cooper Health Routine to keep dogs free from worms and otherwise fit and happy; and this is now perfected by ADMIN. Pulver once a week to blot out the dog flea and all flea-borne parasites and so to minimize the risk of tapeworm infection, ADMIN every day to look after the rest. While ADMIN is being announced in the dog papers, the champion salesman of the Routine—that dirty dog flea—is keeping out of the lime-light, but he will be back on the job again as soon as the good news of ADMIN has been sufficiently broadcast.



# A Toilet Series which means REPEAT CUSTOM ...

*Supreme  
Quality*

*Presentation  
second to none*



**EMBOSSED  
GOLD LABELS**

## THE **Royal** TOILET SERIES

Obtainable in this series:—

BAY RUM  
BRILLIANTINE (also  
odourless)  
COMPLEXION MILK  
DANDRUFF CURE  
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HONEY & ALMONDS  
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LIQUID FACE POWDER  
SHAMPOO FOAM  
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TOILET PARAFFIN  
VIOLET OIL

2 oz.	-	4/3 doz.
4 oz.	- - -	7/6 „
8 oz.	- - -	12/- „
BAY RUM & CANTHARIDES		
4 oz.	-	6/6 doz.

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